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73 No. 1

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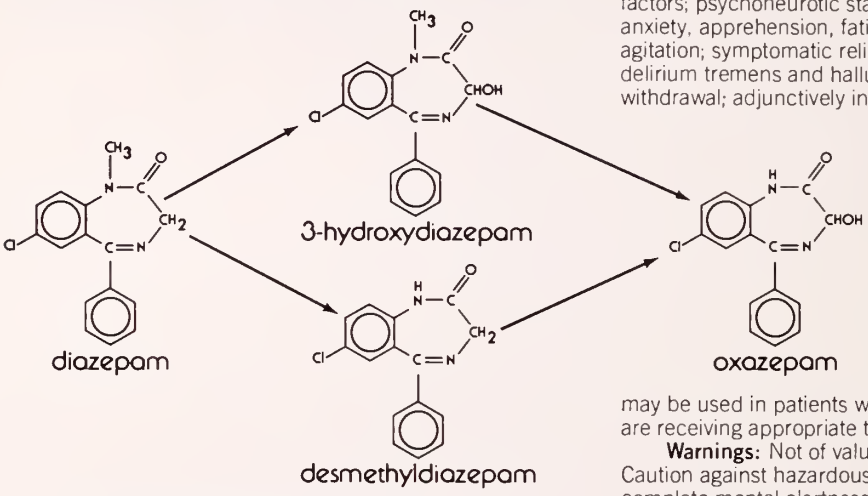

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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JANUARY
1977

Vol. 73 No. 1

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Assaciatian

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CONTENTS

Scientific Articles

ABDOMINAL ANGINA—Robert J. Gardner, M. D.; Thomas J. Tarnay, M. D.; Dominic A. Antico, M. D.; Nancy Gardner, B. A.; and Alvin L. Watne, M. D. 1

STOKES-ADAMS ATTACK IN PRINZMETAL VARIANT ANGINA (REPORT OF TWO CASES AND REVIEW OF THE LITERATURE)—Gita Roy, M. D.; Harold Selinger, M. D.; and William H. Carter, M. D. 5

Scientific Department

MEDICAL GRAND ROUNDS FROM THE WEST VIRGINIA UNIVERSITY MEDICAL CENTER (ANTIBACTERIAL PROPHYLAXIS: IDEAS OLD AND NEW)—Edited by Raymond B. Weiss, M. D. 11

The President's Page

VISITING—John J. Mahood, M. D., President, W. Va. State Medical Association 16

Editorials

KENNEDY-CORMAN 17
UNITY NEEDED AS NEVER BEFORE 18
GENERIC NAMES 18

General News

TENTH MID-WINTER CLINICAL CONFERENCE 19
COUNCIL SUPPORTS DOCTOR WEEKS FOR AMA POST 20
CONTINUING EDUCATION ACTIVITIES 21
ADVICE TO HEART PATIENTS ON COSTS ASKED 21
ACP-WVU INTERNAL MEDICINE CME COURSE 22
AETNA OUTLINES NEW PEER REVIEW PROCEDURE 23

Special Departments

WVU MEDICAL CENTER NEWS x
THIRD-PARTY NEWS, VIEWS, PROGRAM CONCERNS xii
OBITUARIES xiv
COUNTY SOCIETIES xvii
WOMAN'S AUXILIARY xix
REVIEW A BOOK xxi
CLASSIFIED SECTION xxv
INDEX TO ADVERTISERS xxvi

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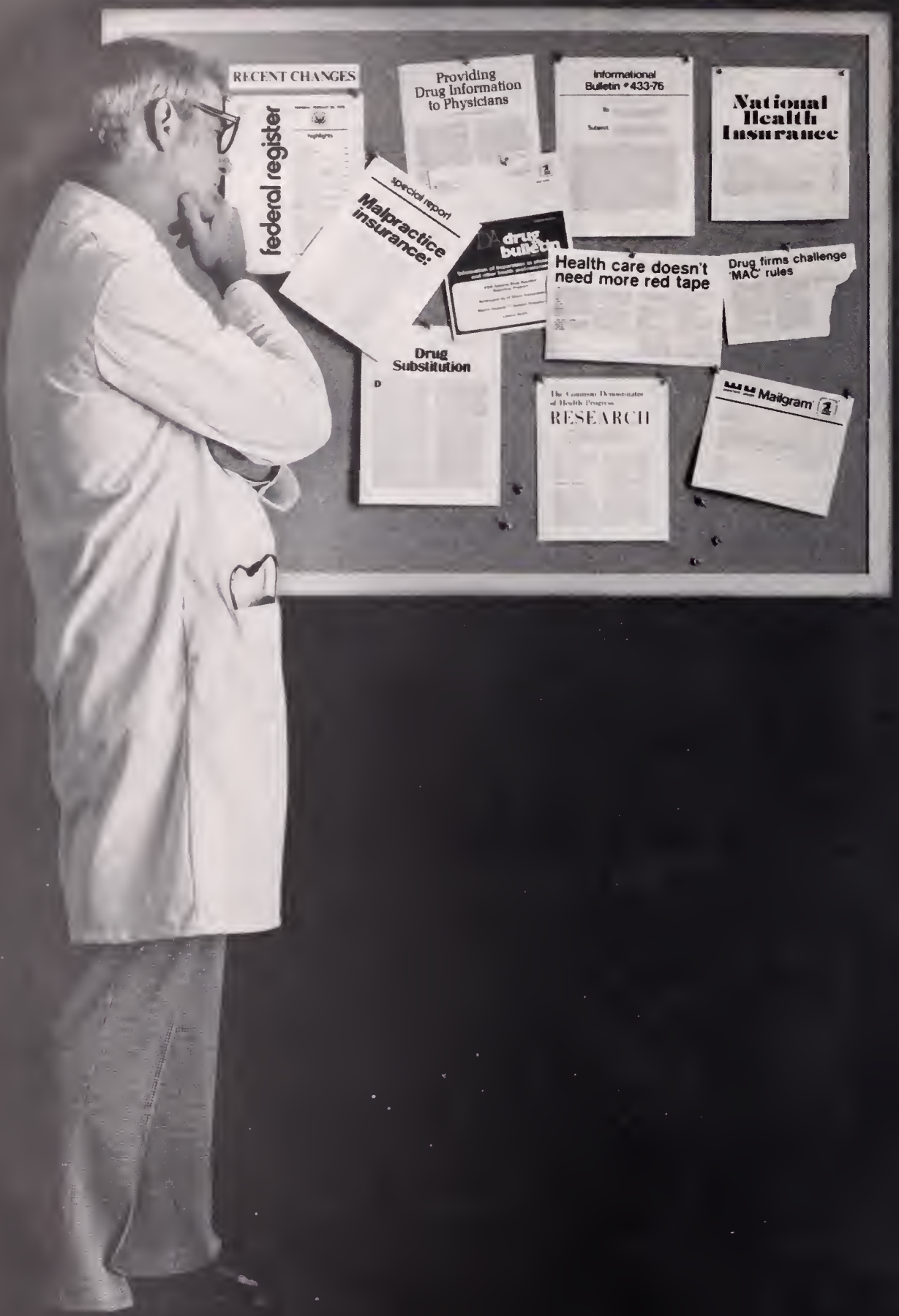
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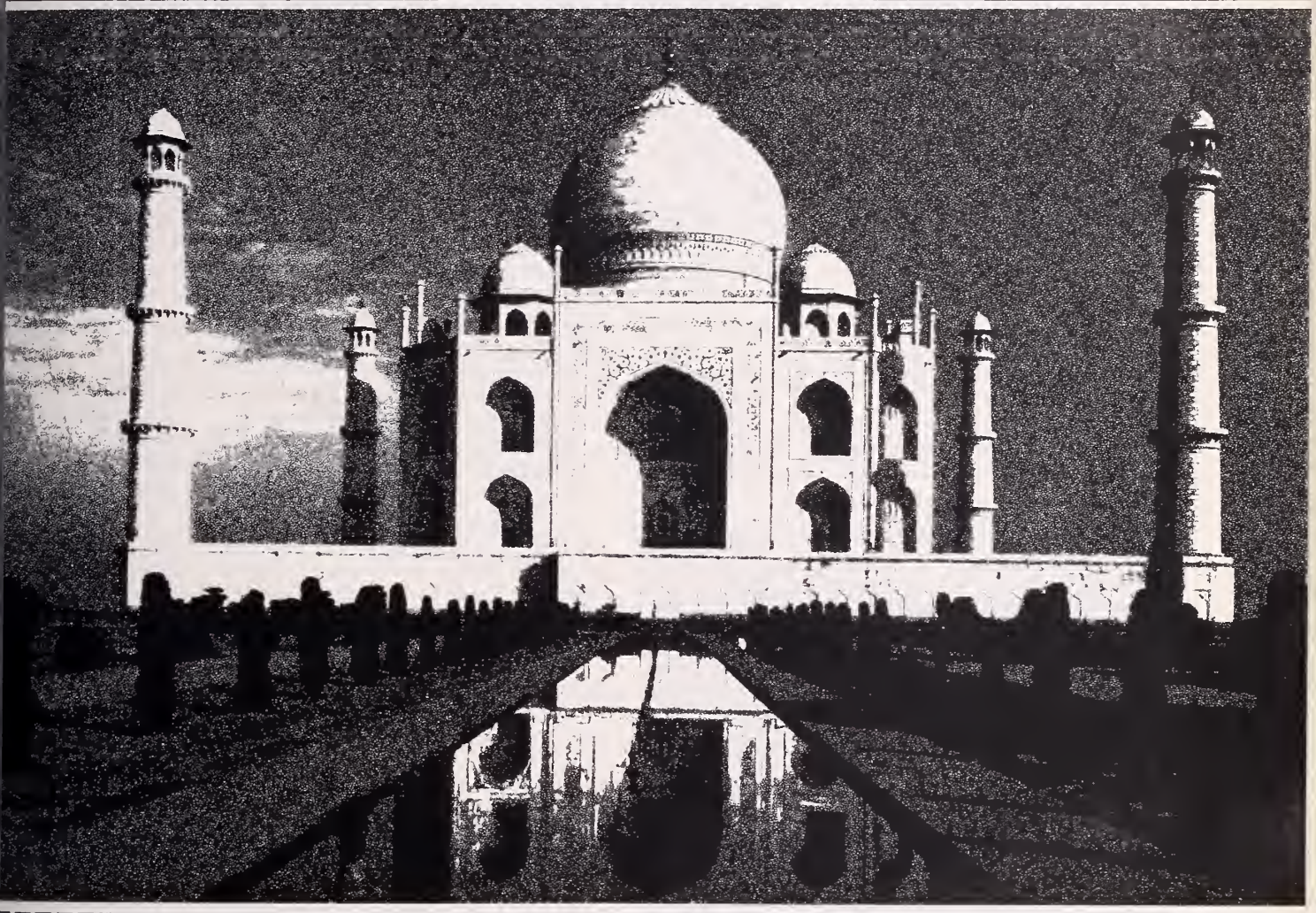

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WVU Medical Center
—News—

A NEW unit designed especially for the intensive care of ill newborn infants was opened recently at West Virginia University Hospital.

The Newborn Intensive Care Unit (NICU) is located in the obstetrics wing of the fourth floor in a newly remodeled and redecorated area facing the front of the hospital and near the delivery room and newborn nursery.

When fully equipped and staffed, the unit will accommodate eight infants, although occupancy will be limited to six during the transition period.

Newborns needing intensive care are those whose lives are threatened by conditions usually caused by prematurity—low birth weight, respiratory distress or heart abnormalities. Other recognizable or potential problems may dictate special attention; the NICU is also responsible for the postoperative care of newborns when surgery is needed.

Most patients in the NICU are kept in clear plastic isolettes. Equipment in the new unit, including that used for intravenous feeding and administration of medication, the heart and respiratory monitors and the vacuum suction machines, is designed especially for infants.

Colorful base cabinets and matching panel boards, containing the electrical outlets for the monitors and life support machinery, line the long walls of the room in which the isolettes are placed.

The laminated plastic counter tops provide space for the monitors, and the open shelving above is for storage. Scrub sinks and wall clocks are at either end of the room. A desk for physicians, an x-ray viewing screen and additional wall shelving are on the end opposite the entrance from the nurses' station.

Pat Coffman, Patient-Care Supervisor; and Linda Gloor, Head Nurse, check a tiny patient in the Newborn Intensive Care Unit which opened recently at West Virginia University Hospital.

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

The nurses' station at the front of the unit is separated from the ward by glass partitions on either side of the open doorway. This affords a constant view of each isolette. An alarm gauge warns of any malfunction of the monitoring system or distress to any of the tiny patients.

In an area behind the two station desks is space for preparing formulae, cabinets for storing medications and drugs, a sink, refrigerator and additional storage shelves.

The NICU, under the direction of staff pediatricians especially trained to care for the high-risk infant, has a nursing staff of at least three at all times. A ratio of one nurse to two infants will be observed.

Not only are the infants monitored by machine, but their vital signs are checked and charted hourly or more often by the nurses.

A head nurse and a patient-care supervisor are in charge of the staff which also includes a station clerk for the day shift. A perinatal nurse educator works primarily with the community hospitals from which many of the NICU patients come.

Nurses assigned to work in the unit are given special orientation and inservice classes to help prepare them for this highly specialized type of nursing care.

The nursing staff also works closely with the Special Care Unit in the pediatrics wing of the hospital. Many of the NICU patients, once they are "weaned" from respiratory support, are moved to the Special Care Unit before being discharged.

University Hospital is one of two regional referral centers for high-risk infants in West Virginia. The Charleston Area Medical Center serves the southern part of the state.

University Hospital first established this specialized service for infants in early 1975 using a section of its Intensive Care Unit for high-risk neonates.

From July 1, 1975, through June 30, 1976, the first full year for which statistics are available, 217 newborns were cared for in the infant section of the Intensive Care Unit or in the Special Care Unit. Of these, 70 per cent, or 152, survived.

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Third-Party News, Views and Program Concerns

Aetna Modifies Some Parts Of Reclassification Plan

A major change developed by Aetna Life and Casualty for the 1977 policy year in the professional liability insurance program it operates for the State Medical Association involves a reclassification of physicians for rating, or premium, purposes.

This change set off a considerable range of questions and concerns among West Virginia physicians; and also among doctors in the other seven states in which Aetna operates similar programs. This has led, in turn, to further discussions with Aetna representatives.

Now, some revisions are being made, with others under consideration.

At a December 6 meeting in Philadelphia involving representatives of Aetna and the eight state medical associations, the company agreed that "apparent inequities have developed involving the specialties of cardiology, pediatrics and radiology."

Aetna's officials, who had recognized earlier that further refinement and modification of the classification plan might be necessary, said that review likewise was continuing of questions raised by family physicians with particular regard to classifying those who do obstetrics but no other major surgery.

Changes 'Warranted'

"Members of your Professional Liability Committees have consulted with the Aetna physicians and together have concluded that changes involving these specialties (of cardiology, pediatrics and radiology) are warranted," the Aetna representatives said. They added:

"The main problem has been that the terminology for describing certain medical procedures is too broad and encompassed many procedures which are considered to be less hazardous. A number of doctors were forced into a higher classification when they administered these less hazardous medical procedures due to the lack of rating flexibility, even though this was not the intent.

"Your representatives and the Aetna have agreed that a re-examination for these three specialties is in order (along with further study of additional questions involving other areas of practice).

"Depending on the other procedures performed, the rating classifications for those physicians who do no major surgery may be revised downward if they perform the following procedures: (1) umbilical catheterization; (2) needle biopsy; (3) endoscopy other than procto-sigmoidoscopy; (4) IVPs and/or cholecystograms; and (5) emergency catheterization.

Revisions Retroactive

"While the details for contacting the affected physicians have not been finalized, the revisions will be retroactive to the renewal policy date (which in West Virginia was January 1, 1977)."

It appeared likely, however, that physicians who might be affected would be asked to complete a short additional questionnaire to establish that they qualify for the change.

Aetna's informal presentation in Philadelphia indicated that the procedures mentioned above generally will fall in the Class I or Class II category with the revisions in the classification plan.

Aetna representatives also repeated two points made in earlier presentations to the medical associations in West Virginia and other states:

Insurance Industry Adopts Revisions

"The revised classification plan has been adopted by the entire insurance industry to comply with recommendations made by the National Association of Insurance Commissioners relating to meaningful statistics in the area of professional liability insurance.

"While the purpose of the questionnaire and new class plan was not to generate increased revenue, this was recognized as a possibility because some doctors were not classified properly. The effect of the questionnaire program was considered and reflected in the premium levels" for policy renewals.

States in which Aetna operates medical association liability programs, in addition to West Virginia, are Connecticut, Delaware, Montana, Utah, Vermont, Washington and Wyoming.

Safe Drinking Water Act

Initial regulations will go into effect in June, 1977, to implement the Federal Safe Drinking Water Act of 1974. The act and regulations will set contaminant limits and monitoring standards to assure the quality of public water supplies. West Virginia has 800 community water supply systems which will be subject to the most stringent new standards, State Health Director N. H. Dyer explained.

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Obituaries

A. T. GORDON, M. D.

Dr. A. T. Gordon of Spencer, founder of Gordon Memorial Hospital there, died on November 20 in the hospital. He was 96.

Doctor Gordon, a surgeon, opened City Hospital in 1918; the hospital was rebuilt as Gordon Memorial Hospital in 1950.

He received his M. D. degree in 1914 from the College of Physicians and Surgeons of Baltimore. A veteran of World War I, he was a member of the Roane County Selective Service Board for 20 years. He also served on the Roane County Court and in the State House of Delegates during the 1930s.

Doctor Gordon was an honorary member of the Kanawha Medical Society, the West Virginia State Medical Association and the American Medical Association.

Surviving are two daughters, Mrs. Virginia Douglas and Miss Hazeldean Gordon, both of Spencer.

* * *

DONALD M. BURKE, M. D.

Dr. Donald M. Burke, an Elkins pediatrician who helped develop one form of polio vaccine, died on November 21 of a heart attack in Woodbridge, Virginia, while returning from a Florida vacation. He was 52.

Doctor Burke was a member of the staff of Memorial General Hospital and Golden Clinic in Elkins for 23 years. He had suffered a previous heart attack in October of 1975 and was on disability leave from the hospital. He suffered the fatal heart attack at the home of his sister-in-law in Woodbridge.

Doctor Burke and Dr. Robert C. Gow of Elkins developed the three-in-one oral polio vaccine in 1963.

He formerly was Chief of Pediatrics, Acting Medical Director and Medical Coordinator at Memorial General Hospital. He was trice President of the State chapter of the American Academy of Pediatrics. He organized the first West Virginia Council to the White House Conference on Children and Youth and served as its President for two terms.

Doctor Burke was serving as Secretary of the Board of Directors at Memorial General Hospital at the time of his death.

A veteran of World War II and the Korean conflict, Doctor Burke was a Fellow of the American Academy of Pediatrics and Chairman of the West Virginia Association of Pediatrics from 1958 to 1964.

A native of Johnstown, Pennsylvania, Doctor Burke was graduated from the University of Pittsburgh and received his M. D. degree in 1947 from that institution's School of Medicine. He interned at the University's Medical Center and served his residency at its Children's Hospital.

He was an hononary member of the Tygart's Valley Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; three daughters, Mrs. Kenneth Karb of Charlottesville, Virginia; Louise Burke of Bloomington, Indiana, and Jane Burke, a student at Mt. DeChantal Academy in Wheeling; and two sons, Donald M. Burke II, a first-year law student at West Virginia University; and Thomas L. Burke, with the U. S. Air Force in Dyess, Texas.

* * *

RAYMOND H. CURRY, M. D.

Dr. Raymond H. Curry, Barboursville family physician, died on November 8 in a Huntington Hospital. He was 74.

Doctor Curry practiced in Barboursville for 48 years and, during his early years there, had served as Cabell County Health Officer. He also had been physician for Morris Harvey College when it was at Barboursville and for the Chesapeake & Ohio Railroad reclamation plant there. He was Consultant for Barboursville State Hospital.

A native of Hamlin, Doctor Curry was graduated from Miami University in Oxford, Ohio; received his first two years of medical study at West Virginia University, and his M. D. degree in 1927 from the Medical College of Virginia. He interned at the Chesapeake & Ohio Hospital in Huntington.

Doctor Curry served for many years as physician for the Barboursville High School football team, of which his son, now Dr. William L. Curry of Richmond, Virginia, was a member. In 1974, he was honored at a dinner and reception arranged by Barboursville area residents.

He was a member of the Cabell County Medical Society, the West Virginia State Medical Association and the Southern Medical Association.

Additional survivors include the widow; a daughter, Mrs. Charles W. Wise, Jr., of Lutherville, Maryland; and a brother, E. B. Curry of Huntington.

* * *

MICHAEL G. HRESAN, M. D.

Dr. Michael G. Hresan, Fayetteville obstetrician and gynecologist, died on December 6 at his home. He was 68.

Doctor Hresan, whose secondary specialty was dermatology, was a former Mayor of Fayetteville (1952-61). A native of Llewelyn, Pennsylvania, he received his M. D. degree in 1938 from the Hahnemann Medical College of Philadelphia. He interned at Muhlenberg Hospital in Plainfield, New Jersey.

Doctor Hresan, a veteran of World War II, had practiced in Fayetteville for 30 years.

He was a member of the Fayetteville County Medical Society, the West Virginia State Medical Association, the American Medical Association and the American College of Surgeons.

Survivors include the widow; a son, Michael G. Hresan II of Fayetteville; a daughter, Miss Sally Lou Hresan of Pittsburgh; a brother, Paul Hresan of Arlington, Texas; and two sisters, Mrs. Mary Griffith of Minorsville, Pennsylvania, and Mrs. Mildred Shimkonis of Philadelphia.

* * *

JAMES E. McCLUNG, M. D.

Dr. James E. McClung, Richwood family physician and colon and rectal surgeon, died on November 25 at his home. He was 65.

Doctor McClung was affiliated with the McClung Hospital, Inc. and McClung Medical Clinic in Richwood.

A native of Richwood, he was graduated from Marshall University and received his M. D. degree in 1941 from the University of Maryland School of Medicine. He interned at Ohio Valley Hospital in Wheeling and served his residency at McClung Hospital.

A veteran of World War II, Doctor McClung was a member of the Central West Virginia Medical Society, the West Virginia State Medical Association, the American Medical Association, the Medical Proctological Society and the West Virginia Chapter, American Academy of Family Physicians.

Survivors include the widow; four sisters, Mrs. Ruth Neller of DePeer, Wisconsin; Mrs. Margaret Johnson and Mrs. Katherine Welch, both of Rupert, and Miss Beatrice McClung of Charleston; and a brother, Dr. William D. McClung of Lewisburg.

* * *

WILHELM KONRAD KALBFLEISCH, M. D.

Dr. Wilhelm Konrad Kalbfleisch, retired Wheeling radiologist, died on November 18 in a hospital there. He was 81.

Doctor Kalbfleisch, a native of Germany, served for 44 years as a member of the Department of Radiology of The Wheeling Clinic, retiring in 1969.

He was a Fellow of the American College of Radiology, a member of the American Board of Radiology and the North American Radiological Society; and an honorary member of the Ohio County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Doctor Kalbfleisch received his M. D. degree in 1919 from the University of Frankfort, in Germany. He interned at the Clementinen Hospital in Hanover, Germany; served a residency at the University of Frankfurt Clinic, and received postgraduate training at the New York Post Graduate Hospital.

Survivors include the widow; a daughter, Mrs. Trudy K. Railing of Wheeling; and two sisters, Miss Elizabeth Kalbfleisch and Miss Nora Kalbfleisch, both of Gelichausen, Germany.

* * *

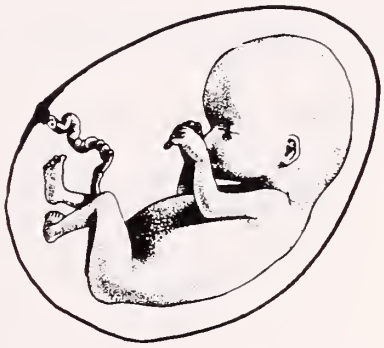
JOHN W. RACKEY, M. D.

Dr. John W. Rackey, Beckley obstetrician and gynecologist, died on October 13 in Charleston. He was 37.

A native of Jersey City, New Jersey, Doctor Rackey was graduated from Yale University and received his M. D. degree in 1969 from the University of London Medical School.

He interned at Orange Memorial Hospital in Orlando, Florida, and served a residency at George Washington University Medical Center in Washington, D. C.

Doctor Rackey was a member of the Raleigh County Medical Society, the West Virginia State Medical Association and the American Medical Association.



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County Societies

McDOWELL

The McDowell County Medical Society met on October 13 at Doctor's Memorial Hospital in Welch.

Mr. Doug Wall of Charleston, Account Supervisor, Aetna Life and Casualty Company, the medical malpractice liability insurance carrier for the State Medical Association, was the speaker.

Dr. Merle C. Bundy of Pittsburgh, from the Medical Division of U. S. Steel, a guest, made a few pertinent remarks.

The Society approved changes in the Bylaws providing for honorary and retired classifications of members.

November 17 Meeting

The McDowell County Medical Society met on November 17 at Stevens Clinic Hospital in Welch.

Dr. John J. Mahood of Bluefield, President of the West Virginia State Medical Association, was the guest speaker. Doctor Mahood presented a very interesting talk regarding the past, present and future of the State Medical Association. A question-and-answer period followed.

Dr. John S. Cook was appointed to fill the remainder of Dr. N. V. Carandang's term as Treasurer of the Society. Doctor Carandang is leaving the area.

New Society officers elected for 1977 included Drs. Arthur A. Carr, President; Dante Castrodale, Vice President; Muthusami Kuppusami, Secretary; and Martin P. Canero, Jr., Treasurer.

The Society approved a contribution of $100 to the McDowell County Health Action Council.—Arthur A. Carr, M. D., Secretary.

* * *

MERCER

Dr. Leonard Goldner, Professor of Orthopedic Surgery from Duke University, was the guest speaker of the Mercer County Medical Society on November 15.

Doctor Goldner presented a well-received presentation on Flexor-Tendon repairs of the hand, illustrated by slides.—David F. Bell, Jr., M. D., Secretary-Treasurer.

* * *

MONONGALIA

The Monongalia County Medical Society met on November 2 at the Old Mill Club in Morgantown.

William H. Miernyk, Ph. D., Benedum Professor of Economics at West Virginia University, spoke on the "Economic Future of Monongalia County." This was a very interesting presentation, and Doctor Miernyk outlined a very encouraging economic picture for both this county and for West Virginia.

A special meeting which had been called for October 21 to discuss political action on the part of

(Continued on Next Page)

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the Society was adjourned for lack of quorum. Doctor Robert J. Nottingham, President (at the November 2 meeting of the Society), expressed concern that the Society needs to take an active part in the political scene. Dr. Isaiah A. Wiles also emphasized the need for political concern and stressed the importance of public relations.—Barbara Jones, M. D., Secretary.

* * *

CENTRAL WEST VIRGINIA

The Central West Virginia Medical Society met on October 28 at the Buckhannon Country Club.

Dr. John J. Mahood of Bluefield, President of the State Medical Association, was the speaker. He discussed the importance of physicians being involved in medical politics and keeping themselves prepared as physicians. He also reviewed the functions of the State Medical Association and encouraged physicians to participate actively in every field.

New officers elected by the Society were Drs. George T. Hoylman, Gassaway, President; Roger Paul Bennett, Upperglade, Vice President; and Joseph B. Reed, Buckhannon, Secretary-Treasurer.

Guests included Mrs. J. L. (Jane) Mangus of Charleston, President of the Woman's Auxiliary to the West Virginia State Medical Association; Mrs. Joseph A. (Helen) Smith of Dunbar, the State Auxiliary's Central Regional Director; Mrs. Jeannette Clark, sister-in-law of Mrs. Smith; Charles R. Lewis of Charleston, Executive Secretary of the State Medical Association; Custer B. Holliday of Charleston, Executive Assistant; Dr. Porfirio R. Pascasio, and Dr. and Mrs. Luis A. Almase, all from Weston; and three West Virginia University medical students—Mark and Jo Jones of Morgantown, and Howard Riggs of Gassaway.

The students pointed out that they had completed a questionnaire more than a year before stating they were willing to be solicited for practice in West Virginia and, as far as they knew, the list had not been circulated. The Secretary was directed to follow up with the WVU Medical School concerning the list.

The Society voted to contribute $100 to the scholarship fund of the West Virginia Wesleyan College nursing program.—Joseph B. Reed, M. D., Secretary-Treasurer.

* * *

TYGART'S VALLEY

The Tygart's Valley Medical Society met on November 18 at the Elkins Motor Lodge in Elkins.

The speaker for the evening was Mr. Doug Wall of Charleston, Account Supervisor for Aetna Life and Casualty, the carrier for the State Medical Association's profesional liability insurance program.

The following new officers were elected by the Society: Drs. H. L. Jellinek, Elkins, President; Raymond W. Cronlund, Philippi, First Vice President; N. Santra, Elkins, Second Vice President; A. Kyle Bush, Philippi, Secretary; and Jerome C. Arnette, Jr., Elkins, Treasurer.—A. Kyle Bush, M. D., Secretary.

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FAYETTE

The Woman's Auxiliary to the Fayette County Medical Society met on October 12 at the White Oak Country Club in Oak Hill.

The Auxiliary welcomed a new member, Mrs. J. L. (Dorothy) Berkley, who is a Past President of the Kanawha County Auxiliary.

Mrs. Carl R. Adkins, President, introduced Mrs. Sue Via of the Social Services Department, Department of Welfare. Mrs. Via presented slides of the various volunteer programs sponsored by her department.

The Auxiliary hopes to start a nursing home visitation program. Mrs. Berkley will coordinate this program.

* * *

McDOWELL

The November meeting of the Woman's Auxiliary to the McDowell County Medical Society was held at the home of Mrs. A. A. Carr.

Miss Edith Hurley gave a very interesting and humorous review of the book, "The Wives of Presidents," by Arden David Melick.

Mrs. Carr, AMA-ERF Chairman, announced she has a cookbook, "Foreign Food Favorites," on sale for $2, with the proceeds going to AMA-ERF.

Mrs. John S. Cook, President, announced that the drawing for the Bicentennial quilt was to be held on November 11, with the proceeds from the quilt divided between the Crippled Children's Society and Mental Health.

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Review A Book

REVIEW OF MEDICAL PHARMACOLOGY (Fifth Edition)—F. H. Meyers, M. D.; E. Jawetz, Ph. D., M. D., and A. Goldfien, M. D., Lange Medical Publishers, Los Altos, Calif. 740 Pages. 1976. Price $12.50.

The authors of this soft-bound volume of 740 pages are clinically-oriented physician-pharmacologists who successfully permeate the Fifth Edition of this book with practical reality.

The medical professionals of today are inundated with as many textbooks, manuals, journals and other publications as are in the staggering explosion of new developments which emerge to await their true role in clinical relevance.

In this book, the authors have made available an up-to-date, reasonably comprehensive, accurate review of medical pharmacology which should be on every physician's bookshelf. The withdrawal of many useless drugs, the report of new, previously unknown drug reactions and incompatibilities, and the established clinical use of previously investigational drugs are areas in which keeping informed is difficult or almost impossible for most practicing physicians.

The authors specifically state that "the primary objective of this book is to foster a skeptical attitude toward all new drug claims and to suggest to the practicing physician that he should occasionally reexamine his prescribing habits and critically reevaluate drugs he may have been using for years."

How is this goal accomplished? The Fifth Edition consists of eight parts comprising 66 chapters, a very useful Appendix containing tables of "Effects of Drugs on Common Clinical Laboratory Procedures," and "Drugs Hazardous for Use During Pregnancy," along with a section of "FDA Evaluation of Effectiveness of Drugs Introduced Between 1938 and 1962." The Index is relatively complete, and the book has many other useful sections for the medical student and physician. The Table of Contents is as follows: PART I—General Information; PART II—Autonomic and Cardiovascular Drugs; PART III—Central Nervous System Drugs; PART IV—Systemic Drugs; PART V—Endocrine Drugs; PART VI—Agents Used in the Treatment of Nutritional and Metabolic Derangements; PART VII—Chemotherapeutic Agents; and PART VIII—Toxicology.

Some of the chapters have been written by guest authors who are authorities on the particular subject. Theoretical and research aspects of pharmacology are at a minimum, with accent on clinical applications of the subject matter. References are selective and of high quality, which should allow the reader to locate any omissions made necessary by the authors' desire to keep the book from becoming unwieldy.

This reviewer enthusiastically recommends this book as a lucid and valuable addition to the "daily-use" library of the student and practitioner in medicine, dentistry, nursing and pharmacy. New editions appear every two years in order to keep the contents up-to-date. The $12.50 price of this book represents one of today's best medical literary bargains.—Merle S. Scherr, M. D.

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1977

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CONTENTS

Scientific Articles

Minimal Cancer of the Breast: Diagnosis by Mammography—Joseph R. Asaro, M. D. 25

A Fatal Case of Idiopathic Omental Infarction—Robert D. Patchell, M. D. 29

Cholestyramine Therapy in Postgastrectomy Alkaline Bile Gastritis—Rafael Antonio Ortiz, M. D.; and Esther Torres, M. D. 31

The President's Page

Construct A Communication Line—Mrs. J. L. Mangus, President, Auxiliary to the W. Va. State Medical Association 34

Editorials

Migraine and Hypertension 35

Anti-fraud Efforts Ignored, Circumvented 35

Here We Go Again! 36

General News

AMA President To Address Annual Meeting 38

Accreditation Advances WVU CME Program 39

Past Auxiliary President Dies 40

Continuing Education Activities 41

ACP-WVU Internal Medicine Course Topics 41

WVU Annual Cancer Teaching Days 42

Fairmont Clinic CME Program Approved 42

Special Departments

WVU Medical Center News x

Third-Party News, Views, Program Concerns xii

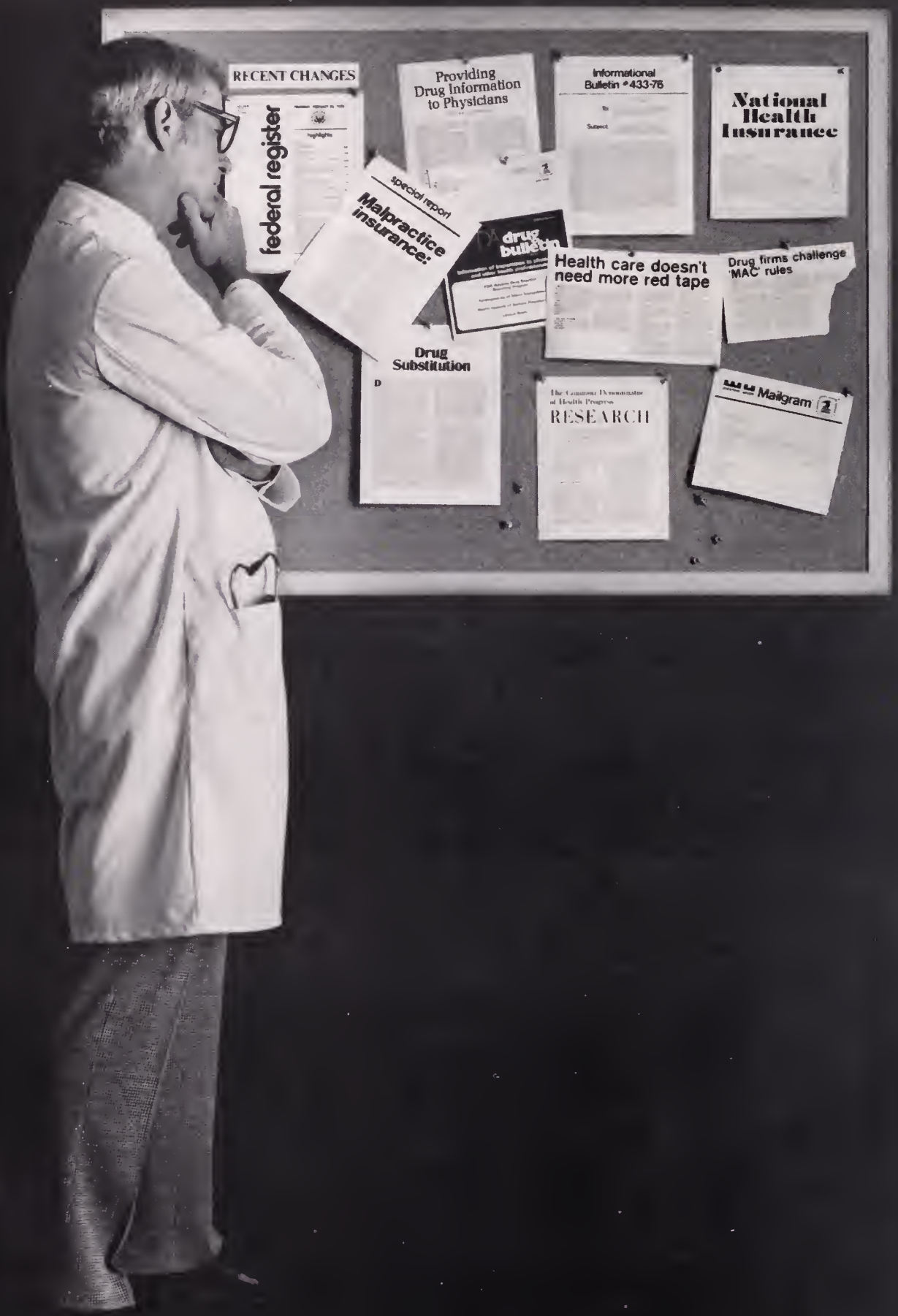
Obituaries xiv

County Societies xviii

Review A Book xxi

Classified Section xxiii

Index To Advertisers xxiv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WVU Medical Center
—News—

• Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Doctors Kluge And Khakoo Join Infectious Diseases Staff

Two former faculty members and research collaborators at the University of Florida have been appointed to the Division of Infectious Diseases, West Virginia University School of Medicine.

Ronica M. Kluge, M. D., named Division Chairman and Associate Professor of Medicine, received both her bachelor's and medical degrees from the University of Florida.

She served her internship and residency at the University of Maryland and its affiliated Veterans Administration Hospital in Baltimore. After completing her subspecialty training there as a fellow in infectious diseases, she joined the faculty in 1970, leaving there four years later to return to Florida.

An Assistant Professor of Medicine at the University of Florida, Doctor Kluge served during the past year as Acting Chief and Chief of the Division of Infectious Diseases. She also was Chief of the Section of Infectious Diseases at Gainesville Veterans Administration Hospital.

Rashida A. Khakoo, M. D., Assistant Professor of Medicine, was born in Dar Es Salaam, Tanzania, and received her medical degrees from Makere University Medical School in Kampala, Uganda.

Her postgraduate training was received at Dar Es Salaam University Medical School, at the Washington, D. C., General Hospital and at George Washington University.

Going to Florida in 1974 as a research fellow in infectious diseases, she joined the faculty the following year.

Drs. Kluge and Khakoo are the co-authors of several presentations and publications detailing their research in various bacterial and viral infections and the use and effects of antibiotics.

In addition, both have written papers in collaboration with other specialists in infectious diseases.

Doctor Jones Speaks In Boston

Barbara Jones, M. D., Professor and Assistant Chairman of the Department of Pediatrics, recently was a speaker in Boston at a scientific program on "Acute Lymphocytic Leukemia in Children—1976" presented by the Subcommittee on Pediatric Hematology and Oncology of the American Society of Hematology.

She represented Cancer and Leukemia Group B, comprising more than 25 different institutions on three continents, whose studies at WVU she directs.

Two days before her talk in Boston, Doctor Jones was elected Chairman of Group B's Childhood Tumor Committee.

Doctor Jones, a member of the WVU faculty since 1961, is known for her work with young patients who have cancer, particularly leukemia.

Biochemistry Chairman

Eugene C. Sander, Ph.D., a former faculty member at the University of Florida, has been named Professor and Chairman of the Department of Biochemistry.

Doctor Sander received his bachelor's degree from the University of Minnesota and his master's and doctorate from Cornell University. He also had postgraduate training at Oak Ridge Institute of Nuclear Studies and at Brandeis University.

Joining the faculty of the University of Florida in 1967 as an assistant professor, he was Professor and Associate Chairman, Department of Biochemistry, at the time of his departure.

Doctor Sander, who has been the recipient of a number of National Institutes of Health grants, is the author of more than 30 publications detailing his research.

Two Named To Pharmacology

Two assistant professors have been named to the faculty of the Department of Pharmacology.

John U. Bell, Ph. D., comes to WVU from Canada, where he completed two years of postdoctoral study at the University of Calgary in Alberta Province.

He received both his B. S. degree in Chemistry and his Ph.D. in Pharmacology from Dalhousie University, Halifax, Nova Scotia.

Mark J. Reasor, Ph.D., received a B. S. degree from Purdue University and his M. A. in biochemistry from Duke University. His Ph.D. in biochemical toxicology was granted by the School of Hygiene and Public Health of the Johns Hopkins University. During the past year he was a postdoctoral fellow with the National Heart and Lung Institute.

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Third-Party News, Views and Program Concerns

Lack of Consultations Factor In Malpractice Claims

According to a recent study, more than 12 per cent of pending malpractice claims against physicians resulted from a delay in obtaining, or failure to obtain, consultations. The majority of these claims involved fractures. The areas of general surgery and general practice, for example, were cited in the study for what were tabbed as failures to confer with orthopedic specialists.

This situation would appear to give the physician a problem for which there is no exact solution. Assuming he renders treatment outside of the perimeter of his specialty, he runs the risk of having a claim filed against him if there are any unfavorable results from his treatment. On the other hand, consultations which some might consider excessive are expensive to the patient and, in some geographical areas, quite an inconvenience. This leaves the physician with the necessity for taking all factors into consideration in each case before proceeding.

The study results imply that a physician who knows the limitations of his own specialty and keeps up with the advances of medicine will have a better insight as to when a referral is the safest possible course of action. Constant education regarding changes and advances in medicine offers the physician the best chance of avoiding malpractice suits, this and other material developed with regard to the overall liability picture have stressed.

Physicians Among Members Of New Health Council

Five doctors of medicine are among the 35 members of the new Statewide Health Coordinating Council (SHCC) set up under provisions of the National Health Planning and Resource Development Act of 1974.

The Council as finalized by Gov. Arch A. Moore, Jr., late in December, will serve in an advisory capacity to the West Virginia Department of Health in its role as the State Health Planning and Development Agency. The Council's work also will include review of various health planning plans and proposals, including the state medical facilities plan specifically required under the 1974 Federal legislation.

Physicians on the SHCC include Drs. Charles E. Andrews of Morgantown, Provost of Health Sciences at the West Virginia University Medical Center; Morris H. O'Dell and James H. Walker, both of Charleston; N. Allen Dyer of Bluefield, and Harry S. Weeks, Jr., Wheeling.

Other SHCC members: Ivan Asay of Berkeley Springs, who is retired; Mrs. Madeline M. Blue, Romney businesswoman; Mayor John C. Musgrave of Point Pleasant; Joseph Walker of Bluefield, a Mercer County Commissioner; George Williams of Weirton, an extension agent; J. Robert Flint, Sutton businessman; Ms. Anise Floyd, Charleston housewife;

Edwin D. Harley of Rachel, a coal miner; Ms. Marian McQuade of Oak Hill, a housewife; Vernon Staggers, a retired Keyser resident; Ms. Alice Couch of Wellsburg, a nursing home administrator; Ms. Doris R. Hughes, a Martinsburg registered nurse; Larry H. Loftin, clinic administrator of Whitesville; Eugene C. Richards of Ravenswood, hospital board representative; Oscar J. Bailes of Princeton, a doctor of osteopathy; Fred Blair of Wheeling, a hospital administrator;

J. Gregory Stewart of Dunbar, a physician's assistant; D. Stephen Crawford of Elkins, pharmacist; J. Stanley Turk, Wheeling, retired; Thomas D. Wilkerson, Charleston, insurance executive; Chancellor Ben L. Morton of the West Virginia Board of Regents, a Charleston resident; Attorney Richard D. Frum of Spencer; Mrs. Arch A. Moore, Jr.; The Rev. R. A. Atkinson, St. Marys;

George W. Bryson of War, retired school administrator; Mayor John Bowling of White Sulphur Springs; Ronald Pearson of Charleston, former State Treasurer; Bob E. Myers of Lesage, representing education, and Morris Homan of Franklin, Pendleton County Commissioner.

A Veterans Administration representative of VA hospitals in the State will be named by that agency.

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Obituaries

GEORGE B. EDMISTON, M. D.

Dr. George B. Edmiston of Webster Springs died on December 20 in a Morgantown hospital. He was 55.

A native of Buckhannon, Doctor Edmiston was graduated from West Virginia Wesleyan College there and received his M. D. degree in 1952 from Temple University School of Medicine.

A veteran of World War II, he was a family physician.

He was a member of the Central West Virginia Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; a son, George M. Edmiston of Webster Springs; two daughters, Carol and Jane Edmiston, both of Webster Springs; three brothers, Matthew Edmiston, Jr., of Buckhannon, Dr. John Edmiston of Plant City, Florida, and Andrew Edmiston of Bethlehem, Pennsylvania; and a sister, Mrs. Elizabeth Bland of Parkersburg.

* * *

JOHN E. McKENZIE, M. D.

Dr. John E. McKenzie of Beckley, a retired eye, ear, nose and throat specialist, died on December 15 in a Beckley hospital. He was 85.

A native of Lake View, South Carolina, Doctor McKenzie began practice in Beckley in 1923. He was one of the founders and a former Vice President of the old Raleigh General Hospital in Beckley, and was President of the Raleigh County Medical Society in 1947.

Doctor McKenzie received his M. D. degree in 1920 from the George Washington University School of Medicine in Washington, D. C. He interned at Gallagher Municipal and Episcopal Eye, Ear, Nose and Throat hospitals there, and served a residency at Presbyterian Eye, Ear, Nose and Throat Hospital in Baltimore.

He was a member of the American College of Surgeons, and an honorary member of the Raleigh County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Surviving is the widow.

* * *

WILLIAM A. WALLACE, M. D.

Dr. William A. Wallace, retired Martinsburg radiologist, died on December 9 in a hospital there. He was 82.

Doctor Wallace, who began practice in Martinsburg in 1922, played a leadership role in the

(Continued on Page xvi)

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The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

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building of the present King's Daughters Hospital there and formerly served as head of the hospital's radiology department. He also was a consultant for the Martinsburg Veterans Administration Hospital.

Doctor Wallace was a former President of the Eastern Panhandle Medical Society. A native of Middletown, Pennsylvania, he was graduated from the Philadelphia College of Pharmacy and Science and received his M. D. degree in 1920 from Jefferson Medical College. He interned at Philadelphia General Hospital and did postgraduate work in gastrointestinal radiography at Jefferson Medical College and Harvard.

A veteran of World War II, he was a Diplomate of the American Board of Examiners of Radiology.

An early conservationist and environmentalist, Doctor Wallace became nationally known in the Izaak Walton League of America in which he served five terms as national vice president and a member of the national board of directors.

He was an honorary member of the Eastern Panhandle Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; three daughters, Mrs. John H. Hodges of Wynnewood, Pennsylvania; Mrs. Nevins B. Hendrix of Martinsburg and Mrs. John L. Owen of Lancaster, Pennsylvania; and one sister, Mrs. Kenny Black of Tulsa, Oklahoma.

* * *

W. MERLE WARMAN, M. D.

Dr. W. Merle Warman, Morgantown surgeon and founder of the Mile Ground Medical Center there, died on December 28 in a Morgantown hospital. He was 72.

A native of Morgantown, Doctor Warman established the clinic in 1948. He was a member of the staffs of Monongalia General Hospital and its Downtown Division in Morgantown.

Doctor Warman was graduated from West Virginia University and received his M. D. degree in 1930 from the University of Maryland School of Medicine. He served a four-year internship and residency at Mercy Hospital in Baltimore.

A veteran of World War II, he was a member of the American College of Surgeons, the Monongalia County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; three brothers, Dr. Carl Warman of Morgantown, James C. Warman of Texas and Dale Warman of Baltimore; and the stepmother, Laura Virginia Warman of Morgantown.

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County Societies

HARRISON

The Harrison County Medical Society met on December 2 at the Sheraton Inn in Clarksburg.

The President, Dr. Julian D. Gasataya, read a letter to the Society from the President of the State Medical Association requesting that the Society assign members to work with members of the State Senate and House of Delegates so that the legislators could be apprised of the position of the State Medical Association on proposed medical legislation. Certain members of the Society were so appointed, as requested. It was the feeling of the Society that, when the appointments were sent to the State Association, there should be a request that the Association make every effort to get advance information concerning proposed legislation to the Society or individual members as soon as possible and earlier than in the past.

Dr. M. V. Kalaycioglu, a member of the State Association's Council, stated that he would convey these feelings at the next meeting of the Council, but urged Society members to make an effort to contact their appointed legislators.

Dr. Joseph Gilman, Chairman of the Scholarship Fund, announced that two loans of $2,500 each had been advanced to two medical students at the West Virginia University School of Medicine; and that one loan of $2,500 which had been taken under advisement would undoubtedly be advanced. All three loans are to students from Harrison County.—Reverdy H. Jones, Jr., M. D., Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on December 7 at the Old Mill Club in Morgantown.

The Society elected the following new officers: Drs. James D. Martin, President; H. Summers Harrison, President Elect; Jerome G. Johnson, Vice President; Barbara Jones, Secretary; and Clark K. Sleeth, Treasurer.

The Society approved a paramedic training program, the approval being requested by the Emergency Medical Service Authority.—Barbara Jones, M. D., Secretary.

State Blood Banks Association To Hold April Meeting

The West Virginia Association of Blood Banks will meet Saturday, April 16, in Rooms 101 and 102 in the Administration Building at the Charleston Area Medical Center, General Division.

There will be a scientific program, a dry workshop and a business meeting to amend the constitution, elect officers and plan further activities.

Further information may be obtained by contacting Dr. Grover B. Swoyer at the Charleston Area Medical Center, Memorial Division, Department of Pathology; or Dr. Mabel M. Stevenson, Tri-State Red Cross Blood Center, 724 10th Avenue, Huntington.

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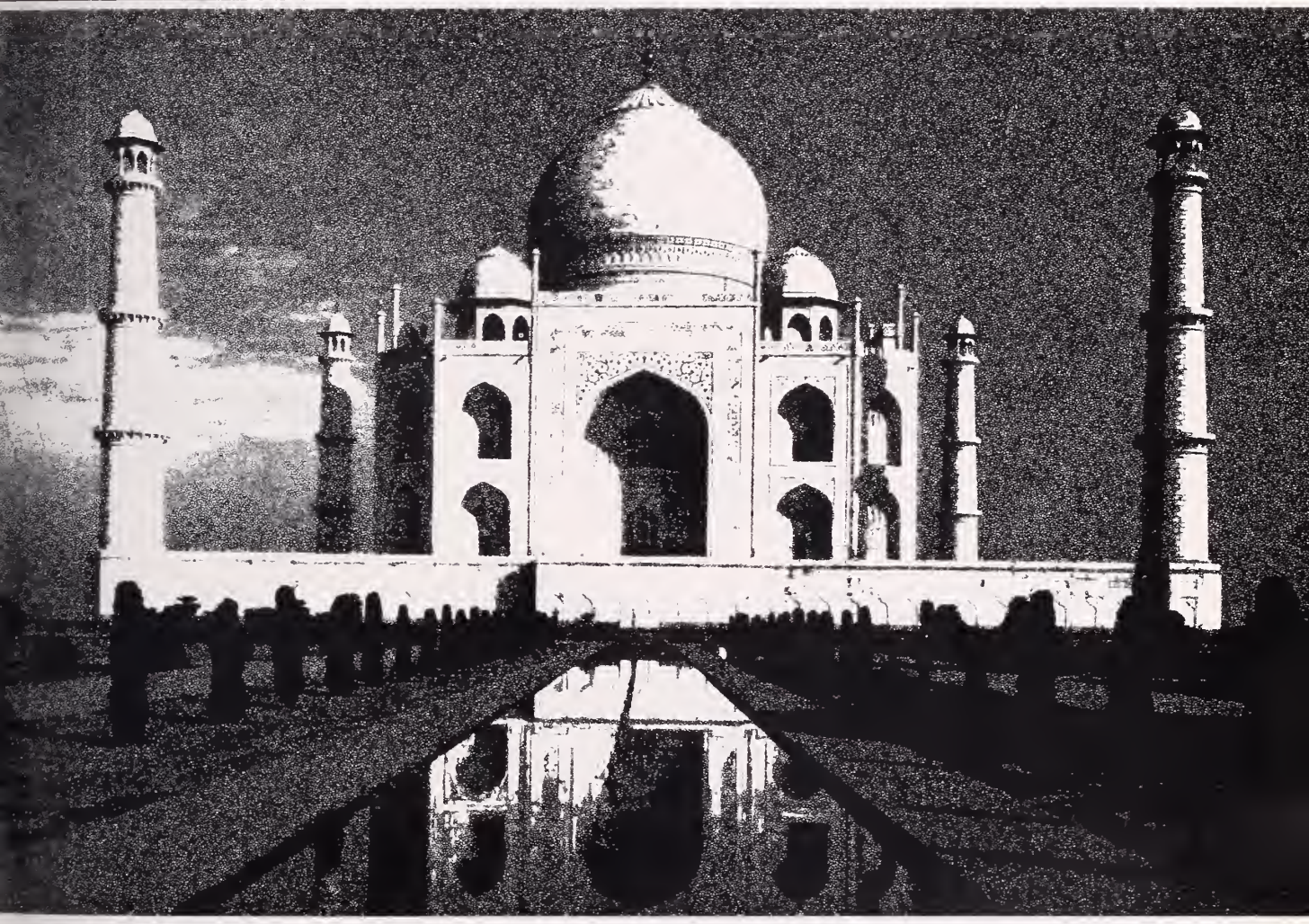

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Brooke	Rogelio L. Velarde	Follansbee	James E. Wise	Follansbee	
Cabell	Robert L. Dunworth	Huntington	James R. Cook	Huntington	2nd Thurs.
Central West Virginia	George T. Hoylman	Gassaway	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	Norman Samuels	Martinsburg	Wm. O. Pischnotte	Martinsburg	2nd Wed.
Fayette	Ivan H. Bush, Jr.	Oak Hill	Chuan H. Lee	Montgomery	1st Wed.
Greenbrier Valley	T. O. Dotson	White Sul. Spgs.	Houston B. Moore	Lewisburg	2nd Wed.
Hancock	George S. Kosar	Weirton	Carlos L. Vasquez	Weirton	3rd Tues.
Harrison	Julian G. Gasataya	Lumberport	Reverdy H. Jones, Jr.	Clarksburg	1st Thurs.
Kanawha	Sherman E. Hatfield	Charleston	Carl J. Roncaglione	Charleston	2nd Tues.
Logan	Leandro Galang	Logan	Carlos F. de Lara	Logan	2nd Wed.
Marion	J. A. Rizzo	Fairmont	Q. A. Melgarejo	Fairmont	Last Tues.
Marshall	David E. Yoho	Glen Dale	Erol Bastug	Glen Dale	1st Tues.
Mason	Young Choi	Pt. Pleasant	Montrie Chaksupa	Pt. Pleasant	4th Tues.
McDowell	Arthur Allen Carr	Welch	Muthusami Kuppusami	Welch	2nd Wed.
Mercer	Roy R. Raub	Princeton	David F. Bell, Jr.	Bluefield	3rd Mon.
Mingo	Wm. L. Mossburg	Williamson	Edward B. Headley	Williamson	2nd Wed.
Monongalia	James D. Martin	Morgantown	Barbara Jones	Morgantown	1st Tues.
Ohio	Fernando G. Giustini	Wheeling	Thomas E. Chvasta	Wheeling	4th Tues.
Parkersburg Academy	Paul G. Modie, Jr.	Parkersburg	Robert F. Gustke	Parkersburg	1st Thurs.
Potomac Valley	D. F. Bensenhaver	Petersburg	David R. Chapman	Keyser	2nd Wed.
Preston	Peter S. Prentice	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	William D. McLean	Beckley	Joseph A. Maiolo	Beckley	3rd Thurs.
Summers	E. L. Jimenez	Hinton	Chandra P. Sharma	Hinton	3rd Mon.
Tygart's Valley	H. L. Jellinek	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	Chas. P. Watson	New Martinsville	Monthly
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Review A Book

COPING WITH FOOD ALLERGY—Claude A. Frazier, M. D., Quadrangle/The New York Times Book Co., New York, N. Y. 335 Pages. 1974. Price $9.95.

The author states that "it is the purpose of this book to make food allergy comprehensible and to demonstrate how, with a bit of effort, to avoid the unpleasant consequences of being allergic to food." The book appeared to be written primarily for patients, parents of children with food allergy, and others who must work with the subject on a day-by-day basis. Unfortunately, the contents of the book should be studied by the physician treating the patient if the author's aim is to be fulfilled since food allergy probably represents the most poorly understood area of the specialty among both physicians and patients.

The diagnosis and treatment of allergic reactions to foods represent the most frustrating, poorly understood, frequently overlooked and confusing areas of medicine. Despite these factors, the increase in allergic disorders, a keener awareness of conditions which qualify as allergic, more sophisticated tools for diagnosis of allergic diseases and newer methods of treatment make it necessary for every physician and allergic patient to become more aware of the role of food allergy in today's health problems. This also includes, in addition to sensitivity to the food itself, the hazards of food additives, preservatives and coloring which, in themselves, can be a major part of the problem.

The symptoms from food allergy may range from fatal, anaphylactic shock to a specific food, to the less dramatic, mild symptoms which involve many body systems in a less than dramatic fashion. This book discusses the significance of clinical allergy to the breakdown products of food through digestion and the role of skin testing with natural foods which does not demonstrate these breakdown products and leads this often useful technique to be disregarded by many physicians.

The book is divided into 13 chapters and a very useful Appendix containing five parts. The author has provided many recipes and food substitutes which are of help to those who must prepare the foods for the allergic patient. The section on menus and recipes is contained in 143 pages. The chapter on prevention of allergic disease is of particular importance to physicians who are charged with the responsibility of starting the newborn infant on a feeding program. The book contains many useful lists of common sources of contact with food allergens which, when properly studied, will allow the reader to realize there is more to hidden food allergy than is realized by most physicians and the general public.

This book is recommended for physicians and patients who desire to have additional information concerning a very confusing but common malady in today's society.—Merle S. Scherr, M. D.

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Anesthesia

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Inez Maggio, CRNA
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MARCH
1977

Vol. 73 No. 3

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Association

Box 1031 Charleston, W. Va. 25324

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CONTENTS

Scientific Articles

Management of Abnormal Female Genital Tract Cytology By Colposcopy—Josh C. Tunca, M. D.; and Loraine T. Withersty, M. D. 43

Induction of Ovulation—F. G. Giustini, M. D. 47

Scientific Department

Medical Grand Rounds from the West Virginia University Medical Center (Controversy in Internal Medicine: Strict Versus Relaxed Therapy of Diabetes Mellitus)—Edited by Raymond B. Weiss, M. D. 54

The President's Page

Are You Ripe or Green?—John J. Mahood, M. D., President, W. Va. State Medical Association 60

Editorials

Threats? 61

Cost Exploitation 62

General News

Two Speakers Named for Annual Meeting 63

Council Starts New Legislative Services 64

Tenth Mid-Winter Conference Held 65

Continuing Education Activities 66

Heart Association Plans CME Conference 66

Review A Book 67

Maternal-Fetal Monitoring Conference 67

Ophthalmology-Otolaryngology Meeting 68

State AAFP Scientific Assembly in April 69

Psychosomatic Medicine Program Planned 70

Dr. Larry C. Carey ACS Speaker in May 71

200 State Suicides During 1975 71

Special Departments

WVU Medical Center News xii

Third-Party News, Views, Program Concerns xiv

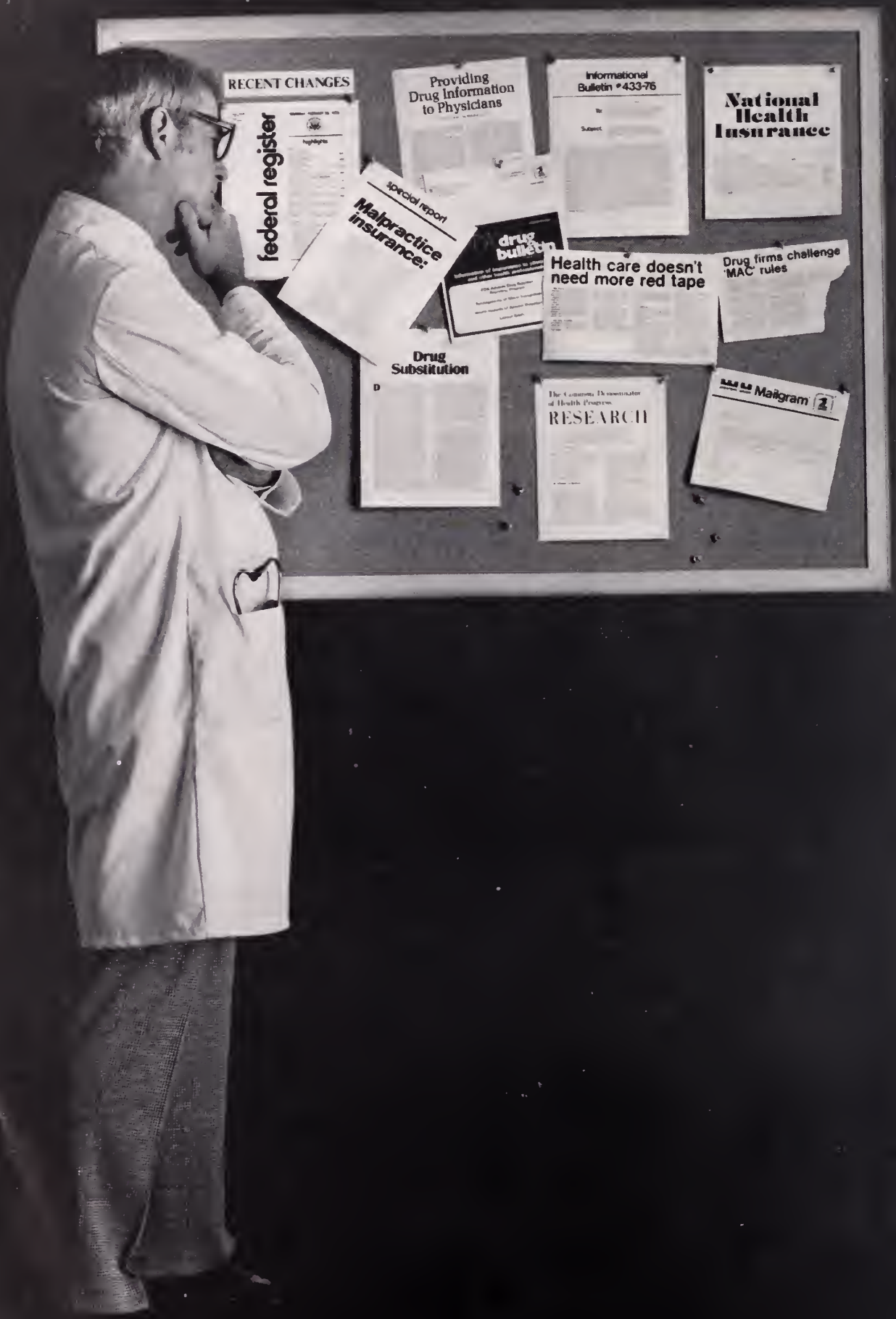
Obituaries xvi

County Societies xviii

Book Review xx

Classified Section xxiii

Index To Advertisers xxiv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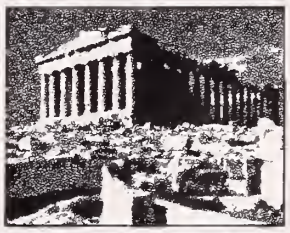

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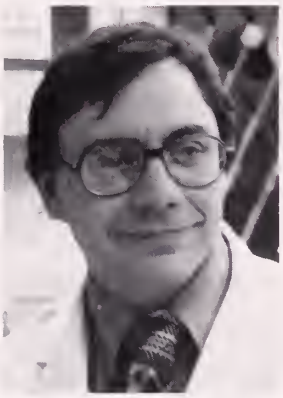
WVU Medical Center
–News–

Doctor Amato Providing Genetic Counseling For State Couples

Parents of children with genetic disorders and birth defects ask many questions: Why did this happen? Are we to blame? What are the chances that other children we might have will be similarly affected? How do we cope with this child's problems?

Couples without children who have a family member mentally or physically affected with what they believe to be a hereditary disorder want to know: Can we have a child with this defect?



R. S. S. Amato, M.D., Ph.D.

Providing answers to many of these questions asked by West Virginia couples is R. Stephen S. Amato, Associate Professor of Pediatrics and Director of the Section of Medical Genetics.

Doctor Amato, who joined the faculty of the School of Medicine last July, has a Ph. D. degree in Human Genetics and Cytogenetics from New York University in addition to his M. D. degree. He served on the faculty of the University of Nebraska while attending medical school and completing his residency in pediatrics.

Most people don't seek out a genetic counselor until they have had one affected child, Doctor Amato said. "For these parents we explain the condition and the specific causes. We attempt to alleviate feelings of guilt that occur and encourage communication between husband and wife," he continued.

"Parents with handicapped children, at least in the United States, are in a high-risk category for divorce. Children who have handicaps need special kinds of medical attention, education, patience and understanding. But they also need the kind of love and emotional support that is best given in a home with a mother and a father."

Counseling from other sources also is used to provide emotional support for the parents. "In West Virginia, we try to have a cadre of informed parents who can go and talk to the couple who has just had a child with a birth defect or a chromosome abnormality like Down's Syndrome," Doctor Amato said.

"Many people have a feeling of retribution as if the birth of an affected child were punishment for their past or the result of something they had done," he continued.

"Young couples who have experimented with drugs—not necessarily hard drugs, even alcohol or tobacco—feel they have caused birth defects in their child."

Doctor Amato said he has found no increased incidence of birth defects among drug users, even in a New York methadone program in which he worked. Children born to drug users may show signs of withdrawal but that can be handled medically, he explained.

"There is no increased incidence of birth defects among women who had previously taken birth control pills," he said, adding that while there is an increased chance of multiple births and consequent prematurity among women taking fertility drugs, birth defects aren't a factor.

Detailed Family History

"Some couples have concerns about certain conditions or diseases in their families. We take a very detailed family history to determine if there is a pattern of genetic or familial disease. Most of the time, we're in the position of providing reassuring information."

"I suppose virtually everyone has what might be called a genetic skeleton in the closet. A number of couples are concerned if they have a family member who has had a psychiatric disorder. We can provide more specific information for them," Doctor Amato said.

The incidence of genetic disorders which result in some degree of physical or mental impairment is about one in 40, Doctor Amato said, but all of us are affected by heredity.

Along with his duties as a genetic counselor, a staff member of the cleft palate clinic and a consultant to the spina bifida clinic at the WVU Medical Center, Doctor Amato conducts a counseling clinic once a month in Charleston.

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

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Third-Party News, Views and Program Concerns

Another Significant Reminder: Report Claims Promptly

There is nothing more important, with regard to professional liability insurance policies, than prompt reporting of actual or threatened suits, claims or occurrences. Any delays in making such reports to carriers act against physicians because the successful defense of suits might be compromised.

Physicians thus should report to their insurers as soon as they suspect that claims or suits might be imminent. "Do not wait for legal papers to be served," Aetna Life and Casualty has advised. "Your good judgment will identify reportable incidents. Be especially sensitive to the following:

"Any threat by a patient or member of his family; any untoward result not anticipated nor considered to be a normal risk of the treatment provided; any request for a copy of your complete records, particularly when you know a similar request has been made for the hospital records; any communication from an attorney representing a patient, and any summons or subpoena served upon you or any of your employees."

"In the event the report concerns only an occurrence or incident that you think is important, any investigation will be handled discretely and limited to your office. If a claim has been made, the investigation must necessarily be more extensive," Aetna has explained. The company also has emphasized:

"You should remember that the reporting of occurrences or incidents when no claim has been made will *not* prejudice your insurance program. In fact, such a report will strengthen your defensive position if a claim is filed at a later date.

"If there is any doubt, report promptly."

Revised Clinical Studies Booklet Available From NIH

The Clinical Center, research hospital of the National Institutes of Health in Bethesda, Maryland, has issued a revised edition of its booklet, *Current Clinical Studies and Patient Referral Procedure.*

This publication, designed especially for physicians, describes the clinical research studies now in progress and outlines the procedure to be followed by those physicians wishing to refer patients to the Clinical Center for study.

Copies of this booklet are available from: Chief, Office of Clinical Reports and Inquiries; The Clinical Center, Building 10, Room 1N-242; National Institutes of Health, Bethesda, Maryland 20014 (Phone (301) 496-2563).

Referrals In Orthognatic Surgery Being Requested For Study

The cooperation of physicians and dentists is requested in the referral of patients in need of orthognatic surgery for a study being conducted by the National Institute of Dental Research, the National Institutes of Health, Bethesda, Maryland.

To be eligible for the study, patients must be between the ages of 15 and 45 years and in good physical and mental health. They must have a dentofacial deformity and/or severe malocclusion with an essential cosmetic component that requires surgical correction as well as orthodontic therapy. Patients with Class II or III malocclusions, apertognathia, and severe facial asymmetry are included. Patients selected for this study must be available for treatment and followup at the Clinical Center for approximately three years.

All patients who are referred will undergo a screening examination, orthodontic workup, and psychological evaluation by NIDR staff members to determine final acceptability.

To refer a patient or obtain further information, please call or write: James B. Sweet, D.D.S., M.S., Building 10, Room 1B-20, National Institutes of Health, Bethesda, Maryland 20014 (phone (301) 496-4371).

High Blood Pressure Report

A recent report of the National High Blood Pressure Education Program marks "the first time this country's medical associations and authorities have reached a consensus on an approach to diagnosis and treatment of high blood pressure," according to Dr. Robert I. Levy, Director of the National Heart, Lung, and Blood Institute.

The "Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure," which appeared in the January 17 issue of the *Journal of the American Medical Association,* underlines agreement over when and/or what treatment is appropriate for high blood pressure. Doctor Levy noted that it provides a cost-effective, practical basis for addressing a health problem that is estimated to affect 23 million or more Americans.

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Obituaries

FRANCIS C. PRUNTY, M. D.

Dr. Francis C. Prunty, Parkersburg dermatologist, died on December 19 in a Parkersburg hospital. He was 70.

A native of Belpre, Ohio, Doctor Prunty had practiced in Parkersburg since 1951. He was a staff member of St. Joseph's and Camden-Clark hospitals in Parkersburg.

Certified by the American Board of Dermatology, he was Chief of Dermatology at the Carle Clinic in Urbana, Illinois, from 1941 to 1951.

Doctor Prunty was graduated from West Virginia University and received his M. D. degree in 1931 from Jefferson Medical College. He interned at St. Agnes Hospital in Philadelphia and served a three-year fellowship at the Mayo Foundation in Rochester, Minnesota. He also received an M. S. degree in Dermatology and Syphilology in 1941 from the University of Minnesota.

A veteran of World War II, Doctor Prunty was a member of the Parkersburg Academy of Medicine, the West Virginia State Medical Association, the American Medical Association, the Southern Medical Association and various dermatology associations.

Survivors include the widow; a son, Charles G. Prunty of Parkersburg; two daughters, Mrs. Katherine MacFarland of Oakland, California, and Mrs. Barbara Barrett of California; a brother, James Prunty of New Orleans; and a sister, Mrs. Anita Hayes of Healdsburg, California.

* * *

R. N. PELAEZ, M. D.

Dr. R. N. Pelaez of Forest Hills, New York, formerly of Man, died on November 25 in a New York hospital, it was learned by *The Journal*. She was 41.

Doctor Pelaez was a former member of the staff of Man Appalachian Regional Hospital and previously was a part-time employee in Charleston for the State Department of Health in the Evaluation Clinic for the Division of Maternal and Child Health.

A native of The Philippines, she received her M. D. degree in 1959 from the Faculty of Medicine and Surgery of the University of Santo Tomas in Manila.

Doctor Pelaez was a member of the Logan County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include a son, Sidney Pelaez; a daughter, Alissa Pelaez; the mother, Asuncion N. Obeleada, and one sister, Daisey Valde, all of Forest Hills.

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County Societies

CABELL

The Cabell County Medical Society met on January 18 at the Gateway Inn in Huntington. This was a joint meeting with the Cabell County Bar Association and the Huntington Dental Society.

Dr. Robert L. Dunworth, incoming President, expressed appreciation to Dr. Charles H. McKown, Jr., for his work as President during the past year.—Colin M. Craythorne, M. D., Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on January 12 at Doctor's Memorial Hospital in Welch.

Dr. Jose A. Calabia presented the medical program. Dr. Cesar R. Esquig discussed an interesting case of a 17-year-old female who went into a state of coma subsequent to being treated for an upper respiratory infection with penicillin and then with Thorazine because of restlessness. She subsequently died with fever despite proper treatment. The autopsy report showed only evidence of bronchopneumonia with negative culture report. The final cause of death, whether due to viral infection, toxicity, or any bacterial infection, was not resolved.

A proposal by the McDowell County Health Action Council for the development of the health resources of the county was unanimously approved in principle by the Society—M. Kuppusami, M. D., Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on January 4 at the Old Mill Club in Morgantown.

Dr. Robert H. Waldman, Chairman of the Department of Medicine at the West Virginia University School of Medicine, presented the scientific portion of the meeting with a talk entitled, "A Rational Approach to the Use of Antibiotics."

Dr. James D. Martin, President, appointed an Ad Hoc Committee consisting of Drs. Margaret Stemple, Chairman; D. Franklin Milam and Barbara Jones, to review a change in the Society bylaws to include a retired membership category comparable to that in the State Medical Association.

The names of Society physicians who will work with State legislators from this area, as requested by the State Medical Association, were announced.—Barbara Jones, M. D., Secretary.

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Book Review

PLAGUES AND PEOPLES—William H. McNeill, Doubleday & Co., Inc., New York. 369 Pages. 1976. Price $10.

This is one of the more striking books to have been published in recent years. After a slow and rather dull start, it presents an amazing erudition in a compact space—no less than a history of mankind from earliest recordings to the present in terms of the impact of infectious diseases. Isolated pieces of information—bubonic plague in the Russian steppes, measles in Mexico, malaria in Ceylon and Scandinavia—are brought into a pattern of human events. The canvas is broad; details can be added to embellish it, but a creative mind has fitted the pieces into a coherent shape.

The breadth of the scholarship is impressive. A paragraph or two on demographic changes in China are followed by a paragraph each on the Ukraine, North American settlers, and why the Irish were able to outnumber the Scots and English who cohabited their land. This is followed by an explanation that the reason malaria left England was that the industrial revolution required technological changes in agriculture which made cattle more available; the cattle, in turn, took the Anopheles mosquito away from people.

Just which part of the sumptuous feast of insights in this book will interest a reader is a personal choice. I understood better why endemic diseases affect children. And I was intrigued by the information that the Amerindians numbered 150 million before the Europeans came, but were reduced to 1.5 million in 100 years by successive epidemics of diseases brought in by the invaders.

Our recent years of affluence and population growth are ripe for change, as prophets from a number of fields have warned us. This imaginative book will help us to prepare, and find ways to preserve, our civilization. It is a bedside book that cannot be guaranteed to induce a peaceful rest.—R. John C. Pearson, M. B.

Doctor Taussig To Receive AMA Achievement Award

Helen B. Taussig, M. D., who helped develop the "blue baby" operation in the 1940s, will receive the American Medical Association's Scientific Achievement Award.

The award will be presented to Doctor Taussig at the AMA's annual convention in San Francisco on June 19, the AMA Board of Trustees announced.

Doctor Taussig, 78, is best known for recognizing and suggesting surgical correction of the "blue baby" syndrome to Alfred Blalock, M. D., the surgeon who first performed the operation.

She has also done extensive research in congenital heart disorders, and in the efficacy of surgery to correct such disorders. She was one of the first to publicize the potential harm to unborn children by Thalidomide, and to study the effects of drugs on unborn children.

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George Orphanos, M. D.

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APRIL
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Vol. 73 No. 4

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Assaciatian

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CONTENTS

Scientific Articles

Run-Away Pacemaker: Diagnosis and Management—Hiroaki Asato, M. D.; Allen F. Bowyer, M. D.; Abnash C. Jain, M. D.; Robert J. Marshall, M. D.; and Thomas J. Tarnay, M. D. 73

A Simple Method for Recovering the Embolized Polyethylene Catheter from the Heart and Pulmonary Artery—Edwin C. James, M. D.; C. Josh Tunca, M. D.; and Dominic Antico, M. D. 77

How People Get Well Through Psychiatry—James R. Hodge, M. D. 80

The President's Page

Support Your Auxiliary—John J. Mahood, M. D., President, W. Va. State Medical Association 86

Editorials

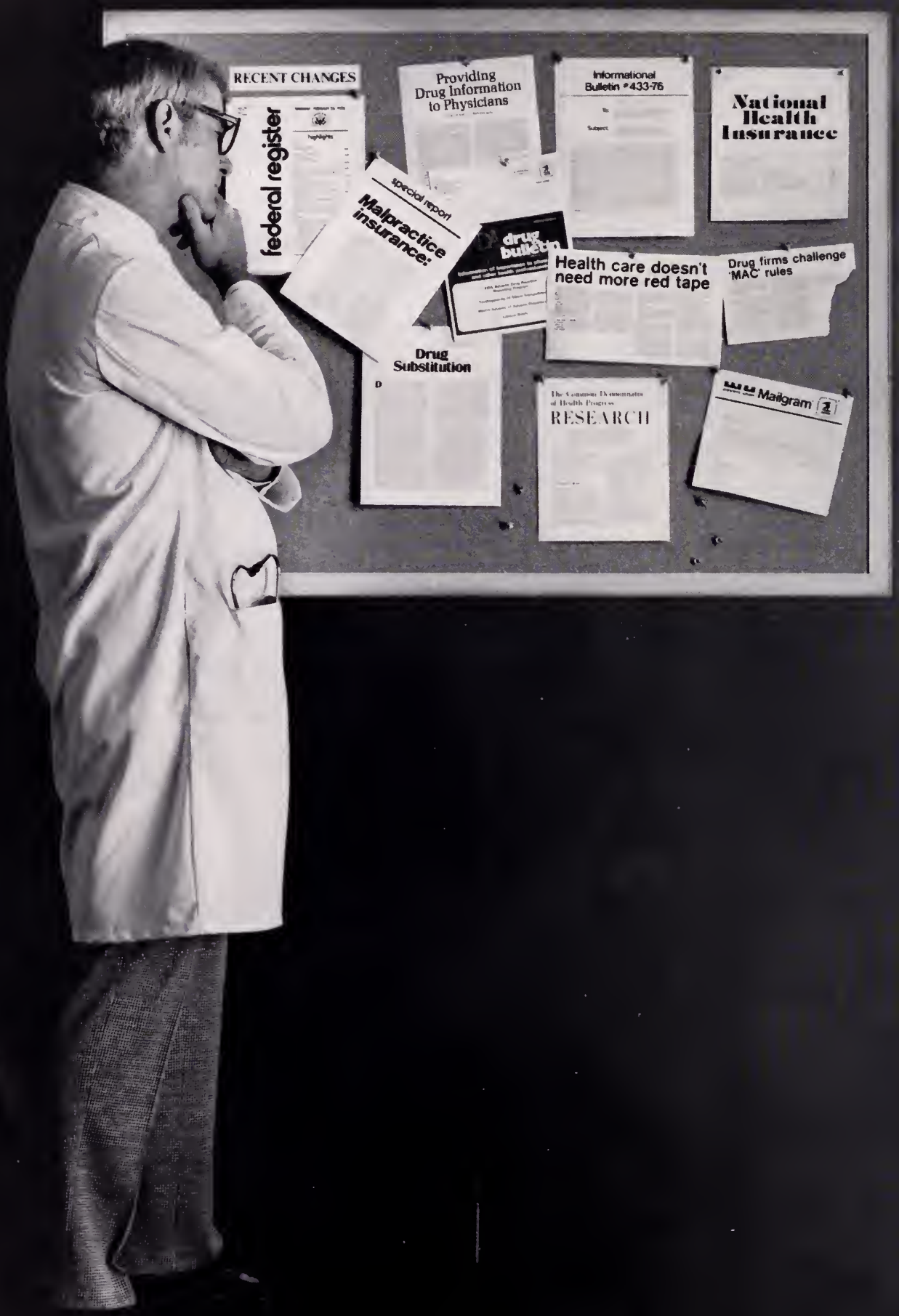
Generic Drug Substitution 87
PSRO Prospects 88
The Private Practitioner 88

General News

Additional Speakers for Annual Meeting 90
Pulmonary Diseases Seminar 91
Continuing Education Activities 91
Teaching Day on Endocrinology 92
25th AAFP Scientific Assembly 93
State, Pennsylvania ACS Chapters To Meet 93
Surgery Teaching Day Planned in Wheeling 94

Special Departments

WVU Medical Center News viii
Third-Party News, Views, Program Concerns x
Obituaries xii
County Societies xiv
Review A Book xvi
Classified Section xix
Index To Advertisers xx


RECENT CHANGES
federal register
Providing Drug Information to Physicians
Informational Bulletin #433-76
National Health Insurance
special report
Malpractice insurance:
drug bulletin
Health care doesn't need more red tape
Drug firms challenge 'MAC' rules
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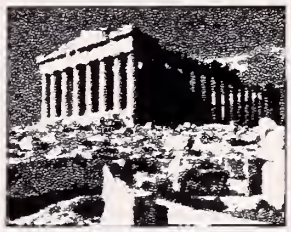

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WVU Medical Center
—News—

Two New Physicians Join Faculty Of Ophthalmology Division

Two assistant professors have joined the faculty of the Division of Ophthalmology, Department of Surgery.

Kjell Dahlen, M. D., a former resident in the Division of Ophthalmology, has spent the past 18 months in Boston, where he held a clinical fellowship in ophthalmology at the Massachusetts Eye and Ear Infirmary.

Born in Fredrikstad, Norway, he received his medical degree from the Royal College of Surgeons in Dublin, Ireland, took postgraduate work in ophthalmology at Harvard University, and served an internship at the University of Florida Hospital in Jacksonville.

V. K. Raju, M.B.B.S., D.O., comes to WVU from England, where he has worked for the past six years as an ophthalmic surgeon at the Royal Eye Group of Hospitals in London. Born in India, he received his medical degree from the University of London.

He is a Fellow of the Royal College of Surgeons of Edinburgh and a Diplomate of the Royal College of Surgeons of London.

Cleft Palate Team Clinics Conducted Two Years

Mystery still surrounds why approximately one in every 1,000 white children and one in every 2,000 black children are born with cleft lip, cleft palate or a combination of the two.

Current thinking blames hereditary factors for no more than half the cleft lip and cleft palate cases and divides responsibility for the remainder among such possibilities as nutritional deficiencies, infections or various drugs.

The face of an infant begins to develop at five to seven weeks after conception. A cleft of the lip would occur about the fifth week and a cleft of the roof of the mouth (which is the hard and soft palate) at about the seventh week. And since the two develop independently, it is possible to have either a cleft lip, cleft palate, or both.

No clinical prenatal test can predict the failure to join together of these sections of the lip and of the palate. The degree of cleft can vary from a slight notching of the red portion of the lip or just a notching of the end of the soft palate, to a complete separation with involvement of the bone where the teeth grow through the gum.

These deviations can create problems of function and appearance, but the biggest handicap for a child with a complete cleft palate is a speech defect, since muscles of the soft palate and throat must work together to close off the back opening to the nose for speech sounds to be produced through the mouth.

Nothing is missing. All the parts are there. But, the pieces just don't fit. With time and expert care, however, they will.

"Cleft palate is not life-threatening or as dramatic as many other congenital defects, but it is a long-term problem. Treatment usually extends from birth to full growth, and requires the properly timed efforts of many specialists," said Edwin V. Kluth, D.D.S., who coordinates the work of the Cleft Palate Team at WVU Medical Center which for two years has been conducting monthly clinics in University Hospital's outpatient department.

Treatment Difficult

The comprehensive clinic has consultants in the fields of pediatrics, genetics, plastic surgery, ear, nose and throat, radiology, speech therapy, pediatric dentistry, dental hygiene, orthodontics, prosthodontics, oral surgery and social service.

Doctor Kluth describes cleft lip and palate treatment as difficult. "You can't predict the results because each patient is different. Some have short palates yet good speech. Some look as if they should do well and don't. The problems can be puzzling and take good team judgment. That's why all of us get together to see the patients."

"We started slowly and felt our way along," said Doctor Kluth, noting that the volume of patients seen doubled in the first year. "In 1975, there were 101 patient visits to this clinic, which is a total effort by the Medical Center and University Hospital."

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Third-Party News, Views and Program Concerns

In-State Referrals Requested For Crippled Children

State physicians are being asked to refer patients eligible for the West Virginia Department of Welfare's Division of Crippled Children's Services to in-state facilities wherever possible.

The policy statement recently issued by Dr. Thomas G. Potterfield of Charleston, Medical Director of the Division of Crippled Children's Services, follows:

"It is the policy of the Division of Crippled Children's Services to provide high quality care by the appropriate physicians within our State and at our State institutions, both public and private. Considerable difficulty arises when patients are referred to out-of-state facilities. Medical care is instituted and then an application is made for Crippled Children's Services. This, then, necessitates contacting the out-of-state physician and facility, and arranging transfer of care to West Virginia physicians and facilities. This interferes with the continuity of care and is often confusing to the patients and their families.

"Lines of referral are often established, especially in our state-line border areas, and we must ask our physicians in those areas to give us special cooperation in making in-state referrals wherever possible.

"In no instance do we wish to jeopardize a patient's care by these regulations. However, we do ask for everyone's cooperation and support of the program and of our own State facilities in handling their patients that come under our program."

FDA Issues New Regulation On Sale Of Hearing Aids

In an effort to assure that the people who buy hearing aids will benefit from them, the Food and Drug Administration recently ordered new conditions on how hearing aids must be labeled and sold.

Under the regulation, effective August 15, 1977, hearing aids may be sold only to people who have had a medical evaluation of their hearing loss. Unless the examination is specifically waived by the purchaser, a statement from a physician that a hearing aid may help will be necessary for purchase. Waiver is not permissible for persons under 18 years of age.

The regulation also requires manufacturers to provide a detailed brochure which tells consumers what hearing aids can do, how they work and how to use them.

"Hearing loss can result from a number of conditions and diseases for which a hearing aid may not be helpful," said Sherwin Gardner, Acting Commissioner of Food and Drugs. "This regulation is designed to protect consumers from being sold hearing aids that won't help them and to assure that people see a doctor if there is a medical reason for their hearing loss.

"The regulation is based in part on an FDA review of current information being given to consumers about hearing aids. The survey found this information to be inadequate and in some cases misleading. The mandatory brochure provided to prospective buyers will help avoid inaccurate information as well as misunderstandings," said Mr. Gardner.

Referral Of Pituitary Tumor Cases Requested For NIH Study

The cooperation of physicians is requested in the referral of patients with pituitary tumors (exclusive of those patients with acromegaly) for a study being conducted by the National Institute of Child Health and Human Development and the National Institute of Arthritis and Metabolic Diseases at the Clinical Center, National Institute of Health, Bethesda, Maryland.

Patients will receive a complete evaluation of their pituitary tumor and endocrine status, and will be considered for a randomized therapeutic program which will necessitate a long-term follow-up in collaboration with the referring physician.

A summary of the workup, findings, and disposition will be sent to the referring physician.

Physicians interested in having their patients considered for admission may write or telephone:

Dr. Charles A. Strott, NIH, NICHD; Clinical Center, Room 10B-3, Bethesda, Maryland 20014 (telephone (301) 496-5909) or:

Dr. Ronald Kahn, NIH, NIAMDD; Clinical Center, Room 8N-238, Bethesda, Maryland 20014 (telephone (301) 496-2596).

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Obituaries

O. S. REYNOLDS, M. D.

Dr. O. S. Reynolds of Franklin died on January 31 at his home there. He was 68. A native of Keyser, he had practiced in the Franklin area for 40 years.

Doctor Reynolds was graduated from West Virginia University and received his M. D. degree in 1935 from Harvard Medical School.

He was a former member of the Potomac Valley Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; and two daughters, Mrs. Gertrude Ratleif of Baltimore and Mrs. Mary Shay Corneby of Monroe, New York.

* * *

RICHARD L. STOVALL, M. D.

Dr. Richard L. Stovall of Walnut, Mississippi, formerly of Princeton, died on February 1 at his home in Walnut. He was 43.

Doctor Stovall had been in practice in Walnut for almost nine months. A native of Princeton, he was graduated from Concord College and received his M. D. degre from the Medical College of Virginia.

He was a former member of the Mercer County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the mother, Mrs. Wanda Harvey Stovall of Princeton; three sons, Private Robert L. Stovall of Ft. Riley, Kansas; and Landis W. Stovall and Christopher H. Stovall, both of Princeton; and two sisters, Mrs. W. J. Freeman of Bluefield and Mrs. Zenel Maksut of Princeton.

High-Risk Pregnancy Course Scheduled In Louisville

A postgraduate course on "Diagnosis and Management of the High-Risk Pregnancy" will be held by the Department of Obstetrics and Gynecology of the University of Louisville (Kentucky) School of Medicine April 28-30.

The course has been designed to help the clinician to identify the high-risk pregnancy, become familiar with perinatal monitoring techniques, and update his knowledge in modern management of the high-risk pregnancy.

Registration is limited, and will close on April 15.

There will be scientific presentations in the topic areas of "Pregnancy Complications—Current Management," "Parameters of Fetal Well Being," "Update 1977," and "Problems of Prematurity." There also will be workshops on intrauterine growth retardation, amniocentesis, ultrasound, neonatal transport, and antenatal diagnosis of chromosomal abnormalities, among others.

The fee will be $150 for physicians. For additional information contact the Office of Continuing Education at the University of Louisville School of Medicine.

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County Societies

CABELL

The Cabell County Medical Society met on February 10 at the Gateway Inn in Huntington. The speaker was Dr. Robert H. Waldman, Professor and Chairman, Department of Medicine, West Virginia University School of Medicine. His topic was "The Diagnosis and Treatment of Systemic Fungal Diseases."—R. Lawrence Dunworth, M.D., President (Acting Secretary).

* * *

MERCER

The Mercer County Medical Society met with the Mercer County Bar Association on February 21. Sixty-five persons representing both groups were present.

Following a social hour and dinner, a combined program oriented toward physician-lawyer relationships was presented by Dr. John J. Mahood of Bluefield, President of the State Medical Association, and Mr. Al Kemper.

Doctor Mahood reviewed present problems related to medical malpractice and outlined presently suggested solutions that have been introduced in the West Virginia State Legislature. Mr. Kemper oriented his discussion toward improving personal and professional relationships between physicians and lawyers.—David F. Bell, Jr., M. D., Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on February 9. The agenda included a talk on sinus headaches by Dr. Joseph C. Ray of Welch.—Joseph C. Ray, M. D., Acting Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on February 1 at the Old Mill Club in Morgantown. Dr. Ellen Hrabovsky, Assistant Professor of Surgery at the West Virginia University School of Medicine, presented the scientific talk on "What is Pediatric Surgery."

During the business meeting, five members of the Society were elected to the Nominating Committee, Delegates to the State Medical Association House of Delegates were elected, and committee assignments were made by Dr. James D. Martin, President.

The secretary notified the Society of physicians desiring to practice in West Virginia as communicated to her by the State Medical Association.—Barbara Jones, M. D., Secretary.

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The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Pediatric Diagnosis and Treatment, 4th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D.; and Donough O'Brien, M. D. 1,053 Pages. Illustrated. Price $15.00. Lange Medical Publications, Los Altos, California 94022. 1976.

Current Obstetric & Gynecologic Diagnosis Treatment, by Ralph C. Benson, M. D., and associate authors. 912 pages. Price $16.00. Lange Medical Publications, Los Altos, California 94022. 1976.

The Medical School Admission Adviser, by Marvin Fogel, M. D., and Mort Walker, M. D. 264 pages. Price $5.45. Hawthorn Books, Inc., New York, New York. 1976.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

Occupational Lung Diseases by William Keith C. Morgan, M.D., and Anthony Seaton, M. D. 391 pages. Price $18.00. W. B. Saunders Company, Philadelphia, Pennsylvania. 1975.

Gilbert Ramirez, recently elected Justice of the Supreme Court of the State of New York, Kings County. Justice Ramirez is blind.

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CONTENTS

Scientific Articles

Villous Adenoma of the Stomach—T. H. Chang, M. D. 95

Emergency Laryngectomy for Trauma of the Larynx —Romeo Y. Lim, M. D. 99

Scientific Department

Medical Grand Rounds from the West Virginia University Medical Center (Drug-Induced Systemic Lupus Erythematosus) — Edited by Raymond B. Weiss, M. D. 101

The President's Page

The Forgotten Man—John J. Mahood, M. D., President, W. Va. State Medical Association 106

Editorials

Psychiatric Problems 107

Parkinson's Disease and Levodopa 108

General News

Workshop During Annual Meeting Planned 109

Wheeling Division/WVU 'Medicine Day' 109

Continuing Education Activities 110

Surgery Conference in Charleston 111

Anesthesiologists Plan Annual Meeting 111

Gonorrhea Strains (PPNG) Alert Issued 112

Fourth Annual Newborn Day Held 113

Family Practice Grads To Stay in State 113

State Heart Association To Meet 114

Respiratory Care Symposium Scheduled 114

Special Departments

WVU Medical Center News viii

Third-Party News, Views, Program Concerns x

County Societies xii

Review A Book xiv

Classified Section xxi

Index To Advertisers xxii

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Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

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WVU Medical Center
—News—

Physicians Choose West Virginia Because Of Family Ties

A large majority of West Virginia physicians choose to practice in the State because of emotional or family ties rather than the more usual economic or professional reasons, according to a statewide survey of active doctors.

Almost 55 per cent of the physicians listed "I like the people here" as one of the "Factors Affecting Location in West Virginia"—the highest of all choices. The average doctor listed three factors in his choice of location.

"Family ties" were listed by 44.8 per cent, "native of West Virginia" by 44.2 per cent, and "desire to fulfill a public need for doctors" by 29.4 per cent.

The responses differed markedly from national data indicating that doctors' choice of where to practice is dictated mainly by population size, degree of urbanization, per capita income, and number of hospitals and training facilities.

The mail questionnaire was directed by Allan S. Hammock, West Virginia University political scientist, and the results were reported at the annual meeting of the West Virginia Political Science Association.

Response of 69 Per Cent

Questionnaires were sent to 282 active doctors out of more than 1,700 physicians in West Virginia. Forty-six questionnaires were non-deliverable and 163 of the remaining 236 physicians returned the completed one-page form, a response of 69 per cent.

Doctor Hammock said earlier national studies "shed some light on why physicians locate where they do . . . but they attempt to make generalizations and inferences on the basis of aggregate, census-type data." As a result, he said, "the reason why individual doctors may or may not locate in a particular state is left unexplained and obscured."

Other findings of his survey include:

—Two-thirds of the physicians were practicing in urban areas, one-third in rural sections of the State.

—Nearly 28 per cent were in general or family practice compared to a nationwide average of 14 per cent.

• **Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.**

—More than half of the physicians responding have practiced in the state for 21 years or more, indicating that the doctor population is an aging one.

In addition to the four items most often cited as the reason for locating in West Virginia, these other factors were named—geographical location, 22.7 per cent; income advantages, 20.2 per cent; received medical training in West Virginia, 18.4 per cent; medical facilities, 14.1 per cent; and social and cultural environment, 9.8 per cent.

Doctor Hammock told the Political Science Association that his study tended to confirm the only other comparable survey, conducted in 1969 by another WVU researcher among WVU medical graduates of 1962-66.

The earlier study by Frederick Schaupp also indicated that graduates who chose to practice in West Virginia did so largely because of factors like a feeling of loyalty to the State, presence of friends and relatives, a sense of obligation to work where needed, and an idea West Virginia was a good place to raise a family.

Health Care Expansion Responses

Hammock's new survey also asked physicians their opinions on various proposals to expand health care in West Virginia. The results, which he said were similar in all sections of the State, included:

—A 78.3 to 9.8 per cent majority favored more clinics in rural areas.

—A requirement that medical graduates be required to stay in the State or repay the cost of their education was disapproved 69.9 to 29.5 per cent.

—82.9 per cent favored expanding the WVU medical school and 12.3 per cent were opposed.

—48.3 per cent opposed establishment of a new medical school at Marshall University, 39.1 per cent were in favor, and 12.4 per cent weren't sure.

—80.1 per cent disapproved state funding of the osteopathic school at Lewisburg, 12.2 per cent favored it, and 7.4 per cent weren't sure.

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Third-Party News, Views and Program Concerns

One In 10 Claims Originates In Emergency Treatment

Twenty-two per cent of the dollars allocated to pending professional liability claims and suits involve alleged injuries resulting from treatment rendered in the emergency room. In terms of numbers of claims, one out of every 10 cases originates in this setting, Aetna Life & Casualty data has shown.

Some of the cases involve treatment errors, but missed diagnosis is the most frequent allegation. The usual medical-legal question is, "Was the diagnostic error due to the physician's failure to exercise proper care and skills?"

When deciding this question, the completeness of the history, types and techniques of testing; who is consulted, and soundness of the physician's reasoning are scrutinized. These and various other factors must be taken into consideration.

"Generally speaking, if all are done properly there is no malpractice. This may be true in certain cases even though the physician's judgment turned out to be wrong. However, a deficiency in any of these areas may be grounds for recovery by the injured patient," the Aetna has explained. The company added:

"Inadequate documentation frequently results in settlement or judgment against the physician. This can occur even though the medical management is correct! Without good emergency room records, the physician is at a disadvantage when trying to show clearly and convincingly the correctness of the care rendered.

"In addition to sound medical judgment and record keeping, rapport is important. Although a case may be successfully defended or discouraged, it will cost the physician his time, money and anguish. Patients seen in the emergency room are usually receiving treatment on a one-time basis. This affords little opportunity for the physician to establish a harmonious relationship. Yet, it is the physician able to establish good rapport with his patient who is much less likely to incur a claim.

"The three R's—reason, records and rapport—are the principal factors affecting the number and seriousness of potential claims."

Referrals Asked In Periodontosis, Juvenile Periodontitis Cases

The cooperation of physicians is requested in the referral of patients with periodontosis and juvenile periodontitis for studies being conducted by the Clinical Immunology Section of the National Institute of Dental Research at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

The NIH is seeking patients who meet criteria of one of the following groups:

Group I, the periodonto*sis* group, will include young persons (under 25 years of age) with x-ray evidence of "severe" localized infrabony alveolar bone loss affecting at least two of the first molars. Patients over 25 years are eligible if x-rays taken earlier demonstrate the above criteria.

Group II will include patients with juvenile periodont*itis,* i.e., persons 30 years or younger, with a more generalized type of bone destruction (infrabony and/or horizontal bone loss).

Group III will include "resistant" patients (over 60 years of age) with at least 24 remaining natural teeth. An exception will be made for individuals who have lost anterior teeth as a result of a traumatic accident. Slight crestal alveolar bone loss will be permissible.

Patients accepted for this study to investigate cellular immunological mechanisms in these disorders will have a dental evaluation including dental radiographs for screening purposes. They will undergo venipuncture for certain baseline studies. Gingival fluid, saliva and dental plaque will also be collected. The patients will then be returned to the care of the referring physician or dentist.

The physician should send a brief letter of referral, on his letterhead, including the patient's name, address and phone number to:

Philip Fox, D.D.S., Clinical Immunology Section, National Institute of Dental Research, Building 10, Room 2B-12, National Institutes of Health, Bethesda, Maryland 20014 (Telephone: (301) 496-6693); or Angela Olsson, L.D.S. (same address and telephone number).

The NIH will contact the physician about his patient following initial evaluation.

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County Societies

CABELL

The Cabell County Medical Society met on March 10 at the Gateway Inn in Barboursville. The guest speaker was Dr. David Hemsell, whose topic was "Estrogens in the Perimenopausal Female."—James R. Cook, M. D., Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on March 9 at Doctors Memorial Hospital in Welch.

The guest speaker was Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia Medical Institute, Inc. Doctor Weeks discussed Professional Standards Review Organization (PSRO) and answered questions.—Muthusami Kuppusami, M. D., Secretary.

* * *

MERCER

The Mercer County Medical Society met on March 21 at Frankie's La Salute Club.

The scientific program was presented by Dr. Louise A. Owens, Bluefield Sanitarium Clinic, who discussed her experiences in Mercer County relating to gastroscopy.

The Society amended its bylaws to conform with those of the State Medical Association concerning retired and honorary membership; and approved a donation of $115 to Camp Kno-Koma for diabetic children.

Dr. John J. Mahood of Bluefield, President of the State Medical Association, summarized health legislation pending in the West Virginia Legislature.—David F. Bell, Jr., M. D., Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met at the Old Mill Club in Morgantown on March 1.

Dr. Jack Vennes, Professor of Medicine at the University of Minnesota, presented the scientific talk entitled "G.I. Endoscopy—Present and Future."

It was reported that the Society's Council had authorized a donation of $230 to support two diabetic children at Camp Kno-Koma and $100 for Camp Apache, the Pace Camp for handicapped children.

Dr. James D. Martin, President, announced the formation of an Ad Hoc (Resolutions) Committee to deal with any issues of public concern for which Society endorsement is requested. This would include any resolutions to the State Medical Association, legislative matters, etc.—Barbara Jones, M. D., Secretary.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Boone	A. E. Glover	Madison	Harold H. Howell	Madison	3rd Wed.
Brooke	Rogelio L. Velarde	Follansbee	James E. Wise	Follansbee	
Cabell	Robert L. Dunworth	Huntington	James R. Cook	Huntington	2nd Thurs.
Central West Virginia	George T. Hoylman	Gassaway	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	Norman Samuels	Martinsburg	Wm. O. Pischnotte	Martinsburg	2nd Wed.
Fayette	Ivan H. Bush, Jr.	Oak Hill	Chuan H. Lee	Montgomery	1st Wed.
Greenbrier Valley	T. O. Dotson	White Sul. Spgs.	Houston B. Moore	Lewisburg	2nd Wed.
Hancock	George S. Kosar	Weirton	Carlos L. Vasquez	Weirton	3rd Tues.
Harrison	Julian G. Gasataya	Lumberport	Reverdy H. Jones, Jr.	Clarksburg	1st Thurs.
Kanawha	Sherman E. Hatfield	Charleston	Carl J. Roncaglione	Charleston	2nd Tues.
Logan	Leandro Galang	Logan	Carlos F. DeLara	Logan	2nd Wed.
Marion	J. A. Rizzo	Fairmont	Q. A. Melgarejo	Fairmont	Last Tues.
Marshall	David E. Yoho	Glen Dale	Erol Bastug	Glen Dale	1st Tues.
Mason	Young Choi	Pt. Pleasant	Montrie Chaksupa	Pt. Pleasant	4th Tues.
McDowell	Arthur Allen Carr	Welch	Muthusami Kuppusami	Welch	2nd Wed.
Mercer	Roy R. Raub	Princeton	David F. Bell, Jr.	Bluefield	3rd Mon.
Mingo	Wm. L. Mossburg	Williamson	Edward B. Headley	Williamson	2nd Wed.
Monongalia	James D. Martin	Morgantown	Barbara Jones	Morgantown	1st Tues.
Ohio	Fernando G. Giustini	Wheeling	Thomas E. Chvasta	Wheeling	4th Tues.
Parkersburg Academy	Paul G. Modie, Jr.	Parkersburg	Robert F. Gustke	Parkersburg	1st Thurs.
Potomac Valley	D. F. Bensenhaver	Petersburg	David R. Chapman	Keyser	2nd Wed.
Preston	Peter S. Prentice	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	William D. McLean	Beckley	Joseph A. Maiolo	Beckley	3rd Thurs.
Summers	E. L. Jimenez	Hinton	Chandra P. Sharma	Hinton	3rd Mon.
Tygart's Valley	H. L. Jellinek	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	Chas. P. Watson	New Martinsville	Monthly
Wyoming	Frank J. Zsoldos	Mullens	George F. Fordham	Mullens	Quarterly

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Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Obstetric & Gynecologic Diagnosis Treatment, by Ralph C. Benson, M. D., and associate authors. 912 pages. Price $16.00. Lange Medical Publications, Los Altos, California 94022. 1976.

Current Medical Diagnosis & Treatment, by Marcus A. Krupp, M. D., and Milton J. Chatton, M. D., and associate authors. 1,066 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1977.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

Radiology:
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Pathology:
Fulvio Franyutti, M. D.

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JUNE
1977

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CONTENTS

Scientific Articles

The Role of Colposcopy in Gynecological Practice —F. G. Giustini, M. D. 115

Acute Ureteropelvic Junction Obstruction by an Aberrant Blood Vessel—Tara C. Sharma, M. D.; Harold N. Kagan, M. D.; and Charles A. Hoffman, M. D. 121

Transvaginal Repair of Rectal Stricture Utilizing the Martius Bulbocavernosus Pedicle Graft—Robert D. Patchell, M. D.; and Bert Bradford, Jr., M. D. 124

The President's Page

Well Done!—John J. Mahood, M. D., President, W. Va. State Medical Association 128

Editorials

The FTC Monster 129
Health Department Reorganization 130
AMA Insurance Plan Reasonable Alternative 131

General News

Governor to Address Annual Meeting 132
Doctor Carper Installed as AAFP President 134
Most WVU Medicine Grads Stay in State 135
AMA Convention in San Francisco 136
23 New Family Practice Residents 137
Medical Boards Group Elects Doctor Flood 137
Doctor Hoffman Given Highest Urology Award 138
WVU Medical School Awards Convocation 138
Review A Book 139
Parkersburg CME Program Accredited 139
Dr. Donald C. Doll Given Cancer Fellowship 140

Special Departments

WVU Medical Center News viii
Third-Party News, Views, Program Concerns x
Obituaries xii
County Societies xv
Book Review xvi
1976 Annual Audit xviii
Classified Section xxiii
Index To Advertisers xxiv

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Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

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Orthopedic Surgery:
E. L. Barrett, M. D.
R. S. Glass, M. D.

Thoracic Surgery:
Daniel W. Dickinson, M. D.

Obstetrics and Gynecology:
Robert W. Leibold, M. D.
Robert T. Brandfass, M. D.
A. Athari, M. D.
J. W. Campbell, M. D.

Urology:
D. C. Trapp, M. D.
J. B. Franz, M. D.

Dermatology:
K. W. Waterson, M. D.
Sheldon Widlan, M. D.

Internal Medicine:
C. H. Hiles, M. D.
A. M. Valentine, M. D.
C. A. Vasquez, M. D.
T. E. Chvasta, M. D.
B. L. VanPelt, M. D.
C. L. Beall, M. D.
P. R. Hedges, M. D.
T. G. Kenamond, M. D.
D. L. Latos, M. D.

Psychiatry:
Stephen D. Ward, M. D.
David Hill, M. D.
David H. Smith, M. D.

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H. L. Kettler, M. D.
J. B. Talbott, M. D.

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James P. Frum, M. S.

Clinical Laboratories:
Danna Burlenski
Donna Bryan

Physician Assistants:
Joann Green, P. A.
Michael G. Simon, P. A.

Technologists:
Electrocardiography:
Betty Maguire, R. N.
Brenda Muklewicz, R. N.
Electroencephalography:
Juanita Stone, R. N.
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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Doctor Flink Master Of American College of Physicians

Edmund B. Flink, M. D., Professor of Medicine, has been named a Master of the American College of Physicians.

This honor was bestowed by the Board of Regents of the ACP at the annual meeting held recently in Dallas, Texas. The title of Master is given to only from seven to 10 physicians nationally each year.

Doctor Flink joined the faculty of the WVU School of Medicine in 1960 as Professor and Chairman of the Department of Medicine. He resigned the chairmanship last year to devote full time to teaching and research. At that time, he was appointed Claude Worthington Benedum Professor of Medicine, the highest academic title at WVU.

Born in Isanti, Minnesota, he received the M. B., M. D. and Ph. D. degrees from that state's university and spent a year of advanced fellowship training at Harvard University.

He has served as a member of the Medical Manpower Commission of the U. S. Public Health Service and holds membership in a number of professional societies and organizations, including Fellowship in the ACP.

His research in endocrinology has contributed extensively to medical knowledge, particularly his investigations of magnesium deficiency in man and the relation of alcohol and magnesium metabolism.

Hospital Director Cites Benefits Of Utilization Review

West Virginia University Hospital Director Eugene L. Staples believes federally mandated review of the utilization of hospital services and the level of medical care has resulted in more plusses than minuses.

Pointing out positive aspects, he said utilization review and medical audit, in conjunction with simultaneous nursing care audits, have brought about better service in hospital units and have improved charting.

"Patients' records must properly justify the need for hospitalization," he emphasized.

Staples also said that utilization review had pointed out areas where screening tests and examinations could be reduced, resulting in better use of ancillary services such as x-ray procedures, laboratory tests and drug usage.

"Utilization review has provided screening criteria which prevent misuse of hospital facilities by those patients who can be served on an outpatient basis. For some inpatients it has resulted in earlier discharge.

"Additionally, it has given our medical staff the opportunity for true peer review," he said. "Our system is serving as a model for PSRO (Professional Standards Review Organization) in West Virginia."

Coronary Club Informs Patients, Families

If you're a heart patient at West Virginia University Hospital and are either ambulatory or able to sit in a wheelchair, you and your family have an opportunity to get some answers at meetings of the Coronary Club held at noon each Wednesday.

The meetings which are conducted by doctors, dietitians, nurses and social workers, give patients and their families the information they need to cope with the physical and emotional aftermath of a heart attack and reduce the risk of a recurrence.

Begun in late February, these group therapy sessions have been well-received by the patients and their families, according to Abnash C. Jain, M. D., Associate Professor of Medicine, and Director of the Coronary Care Unit.

"Attendance is voluntary but almost all patients participate," he said. "The families are particularly enthusiastic. It gives them an opportunity to come in contact with the doctor in a manner not usually available in a hospital.

"The sessions foster interactions and give patients the opportunity to share experiences. Certain fears surface which might not be otherwise expressed."

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Third-Party News, Views and Program Concerns

NIH Invites Grant Applications In Diabetes, Eye Diseases

The Center for Research for Mothers and Children (CRMC) of the National Institute of Child Health and Human Development (NICHD) invites applications for grants to study pregnancies associated with pre-diabetes mellitus, gestational diabetes and overt diabetes of either the adult or youth-onset type and to study the offspring of diabetic pregnancies.

Applicants must use the regular research grant application (form NIH 398) which is available at institutional central application control offices. In *both* the covering letter and at the top of the space provided for an abstract on page 2 of the application, clearly identify the application as being in response to this announcement by using its title and date of publication (Researchers in the Field of Diabetes Mellitus; Diabetes in Pregnancy: Effects on Mothers & Offspring; 12-20-76).

Applications will be reviewed by the Division of Research Grants in consultation with the NICHD staff. The deadlines for receipt of applications are July 1 and November 1.

For further information, please contact: Dr. Joseph C. Hwang, Center for Research for Mothers & Children, National Institute of Child Health & Human Development, Bethesda, Maryland 20014 (telephone (301) 496-1485).

Diabetes And Related Eye Diseases

The National Eye Institute of the NIH has invited applications for research grants in the field of diabetes mellitus and related eye diseases.

Applications involving either laboratory or clinical research or both are of interest for this program. The purpose of this announcement is to re-emphasize NEI interest in the study of diabetic retinopathy and other ocular complications associated with diabetes mellitus and related disorders of the small blood vessels.

Applicants must use the regular research grant application (form NIH of PHS 398) which is available at institutional central application control offices. Applications will be received through the Division of Research Grants Study Section mechanism and, where assigned to the NEI, by the National Advisory Eye Council. Applications recommended for approval will compete for available funds with all other approved applications assigned to the National Eye Institute.

The deadlines for receipt of applications are July 1 and November 1. The earliest possible award dates will be approximately nine months after receipt dates. Applications received too late for one cycle of review will be held for the next.

Inquiries should be addressed to: Chief, Scientific Programs Branch, National Eye Institute, NIH, Bethesda, Maryland 20014 (telephone (301) 496-5301).

Completed applications should be mailed to: Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

Referral Requested In Carcinoma Of The Pancreas By NCI

The cooperation of physicians is requested in the referral of patients with biopsy-proven locally unresectable adenocarcinoma (ductal, acinar, or undifferentiated type) of the pancreas for studies being conducted by the National Cancer Institute's Medicine Branch at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Otherwise untreated patients without widespread intra-abdominal or intra-hepatic disease who are ambulatory and under 65 years of age are potentially acceptable. Studies involve intensive treatment with radiotherapy and chemotherapy.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, National Cancer Institute, Building 10, Room 12N226, 9000 Rockville Pike, Bethesda, Maryland 20014 (telephone (301) 496-4916).

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Obituaries

WILLIAM A. KLAUSMAN, M. D.

Dr. William A. Klausman of Rupert died on April 14 at his home. He was 64.

A native of St. Marys, Pennsylvania, he was a graduate of the University of Pittsburgh and received his M. D. degree in 1936 from the University of Louisville School of Medicine.

A former member of the West Virginia State Medical Association, Doctor Klausman practiced in the Rupert area for 35 years.

Survivors include the widow; a daughter, Miss Ann Klausman, at home; a foster daughter, Mrs. Mary Garland of High Point, North Carolina; a foster son, Michael Klausman of Dyer, Indiana; and two sisters, Mrs. Carl James of Erie, Pennsylvania, and Mrs. Clarence Decker of St. Marys.

* * *

MILFORD F. TOWNSEND, M. D.

Dr. Milford F. Townsend, Petersburg family physician, died on April 3 at his home. He was 76.

Doctor Townsend had been associated with Dr. Lysle T. Veach in the Veach-Townsend Clinic in Petersburg since 1949. The clinic now operates in the Grant Memorial Hospital in Petersburg. He also had practiced in Dailey, in Randolph County.

At the time of his death, Doctor Townsend was Treasurer of the West Virginia Chapter, American Academy of Family Physicians.

Doctor Townsend was a graduate of West Virginia Wesleyan College and the former two-year medical school at West Virginia University, receiving his M. D. degree in 1942 from the University of Pennsylvania School of Medicine. He interned at the City Hospital of Akron (Ohio).

A veteran of World War II, he was a member of the Potomac Valley Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; a daughter, Mrs. Patricia Downs of Petersburg; three sisters, Mrs. Bessie Newcomb, Hall; Mrs. Juanita Worstell, Uniontown, Ohio, and Mrs. Marjorie Laudin, Philippi; and three brothers, John Townsend, Van Nuys, California; Haskel Townsend, Baden, Pennsylvania, and Jackson Townsend, Charleston.

HALVARD WANGER, M. D.

Dr. Halvard Wanger, retired Shepherdstown family physician, died on April 24 in a Martinsburg hospital. He was 78.

Doctor Wanger was well known as the organizer and founder of the Potomac Shenandoah Valley Post Graduate Institute, which met yearly in Martinsburg from 1955 to 1974.

In 1975, the Hal Wanger Family Practice Conference, which is held annually, was established in his honor at the West Virginia University School of Medicine.

Doctor Wanger practiced in the Eastern Panhandle from 1932 until 1972.

He was a Past President of the West Virginia Chapter, American Academy of Family Physicians; the West Virginia Diabetes Association, the Eastern Panhandle Medical Society, and the staff of King's Daughters Hospital in Martinsburg.

Doctor Wanger was a member of the State Medical Association's Publication Committee (Editorial Board) from 1961 through 1972.

A native of Chicago, he received his M. D. degree in 1931 from the University of Illinois College of Medicine. He interned at the Swedish Covenant Hospital in Chicago and received training in anesthesia and roentgenology at the Chicago Presbyterian Hospital.

He was an honorary member of the Eastern Panhandle Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; two sons, Drs. William H. Wanger and H. Alexander Wanger, both of Martinsburg; two daughters, Mrs. Joseph Selove of Herndon, Virginia, and Miss Brita Elizabeth Wanger, at home; and one sister, Mrs. Martha Sorensen of Walnut Grove, California.

* * *

A. D. FERRELL, M. D.

Dr. A. D. Ferrell, retired Lewisburg ophthalmologist, died on May 8 in a Fairlea nursing home. He was 86.

A native of Talcott (Summers County), Doctor Ferrell had practiced in Greenbrier County for 36 years. He was a Past Secretary of the Greenbrier Valley Medical Society.

Doctor Ferrell was graduated from Marshall University and received his M. D. degree in 1926 from the Medical College of Virginia.

He was an honorary member of the Greenbrier Valley Medical Society, the West Virginia State

(Continued on page xiv)

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OBITUARIES—Continued from page xii

Medical Association and the American Medical Association.

Survivors include the widow; a daughter, Mrs. Merle F. Branaman of Raleigh, North Carolina; a son, Dr. Robert M. Ferrell of Lewisburg; a sister, Mrs. Pauline White of Forest Hill (Summers County); and two brothers, James E. Ferrell of Staunton, Virginia, and Harry B. Ferrell of Anaheim, California.

* * *

EDWARD S. HAMILTON, M. D.

Dr. Edward S. Hamilton, Oak Hill family physician, died on March 30 in a Beckley hospital. He was 88.

A native of Fayetteville, Doctor Hamilton received his M. D. degree in 1911 from the College of Physicians and Surgeons of Baltimore.

He practiced in Oak Hill from 1911 until his retirement in April of 1976.

Survivors include the widow; a daughter, Mrs. Charles E. Lewis of Beckley, and three sisters, Mrs. Grace Marschner and Mrs. Nell Gover, both of Charleston, and Mrs. Elizabeth Burke, Huntington.

WILLIAM E. MYLES, M. D.

Dr. William E. Myles of White Sulphur Springs died on May 6 in a Clifton Forge (Virginia) hospital. He was 91.

Doctor Myles practiced at Neola and White Sulphur Springs from 1913 until his retirement in 1972.

He received his M. D. degree in 1913 from the College of Physicians and Surgeons of Baltimore.

A veteran of World War I, he was an honorary member of the Greenbrier Valley Medical Society, the West Virginia State Medical Association and the American Medical Association.

Surviving is a brother, Thomas A. Myles of Fayetteville.

Pellagra Baffled Doctors

For several centuries pellagra was a serious disease that baffled doctors. Physicians called it the disease of the Four Ds—dermatitis, diarrhea, dementia, and finally death. In the early years of the 20th century, pellagra was found in more than half of the states of the United States and was killing thousands of persons each year in the South.

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JAMES P. THOMAS, M.D.

UROLOGY
STEVE J. MISAK, M.D.

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JAMES L. FOSTER

County Societies

CABELL

The Cabell County Medical Society met on April 14 at the Gateway Inn in Barboursville.

Dr. Ed Smith gave an informative talk on "Diagnosis By Ultrasound," followed by a lively question-and-answer session.

Dr. Gilbert A. Ratcliff, Jr., was named to represent the Society on the Marshall University Medical Advisory Board.—Colin M. Craythorne, M. D., Acting Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on April 13 at Stevens Clinic Hospital in Welch.

Dr. Joseph C. Ray, ear, nose and throat specialist at the hospital, discussed hearing problems of people who work in noise. He suggested using lamb's wool in the ears since it does not stick to the ear like cotton and also doesn't get wet and block the ears.

Doctor Ray said there is very little low-tone loss in the early stages of hearing loss, but a rapid high-tone loss in the early stages.—M. Kuppusami, M. D., Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met at the Old Mill Club in Morgantown on April 15.

Dr. Herbert H. Pomerance, Professor of Pediatrics, Charleston Division/West Virginia University Medical Center, and Director of Pediatrics, Charleston Area Medical Center, was guest speaker for the scientific session.

His topic was "An Approach to Fluid Balance in Children."

Because of growing membership, the Society is now entitled to increase its number of delegates and alternates to the State Medical Association's Annual Meeting from 11 to 12 each. Drs. J. Hugh Wiley and Edwin J. Morgan were unanimously elected as the one additional delegate and alternate, respectively.

It was reported that the Society's Council had approved the expenditure of $167 for a medical student from Monongalia County to attend the national convention of the Student Medical Association.—Barbara Jones, M. D., Secretary.

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Book Review

OCCUPATIONAL LUNG DISEASES—William Keith C. Morgan, M. D., and Anthony Seaton, M. D. W. B. Saunders Company, Philadelphia, Pennsylvania. 391 Pages. 1975. Price $18.

This book presents the broad picture of occupational lung diseases with enumeration of the many different types, their history, physiology and pathogenesis.

In many areas the history is somewhat detailed and presented in a very interesting manner.

The glossary of abbreviations is helpful since the text, at times, becomes confusing by using abbreviations frequently.

The voluminous references should be especially helpful to someone engaged in this work or writing in this field.

Completeness of the material is attested to by inclusion of such infrequent syndromes as paprika splitters and cheese washers diseases.

The clinical and pathologic material is necessarily presented in somewhat scant detail. The broad discussions of asbestosis and mesothelioma, coal miner's lung and cancer, etc., are alluded to but not discussed in great detail. No firm, provocative stand is taken on these issues, which is probably desirable in view of our changing knowledge.

The book is fairly easy reading, well written and a good reference source.—L. Walter Fix, M. D.

LUPUS (The Body Against Itself)—Sheldon Paul Blau, M. D., and Dodi Shultz. Doubleday, Inc., Garden City, New York. 107 Pages. 1977. Price $4.95.

This small book begins like a Sherlock Holmes murder mystery, but of course the criminal is never apprehended. There are many suspects: viruses, heredity, lymphocytes, cloning, drugs, ovaries, the thymus gland, and New Zealand Black Mice. I felt like I was reading Paul de Kruif and the Conquest of Pellagra at first. Actually the book is a fine discussion of the strange malady, systemic lupus erythematosus, and will be appreciated by the clinician.

I am afraid it may badly frighten most patients with lupus.—John J. Mahood, M. D.

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James A. Gardner, M. D.

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S. A. Zahir, M. D.
Mario C. Ramas, M. D.
George Orphanos, M. D.

Obstetrics-Gynecology
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Annual Audit, 1976

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1976 has been completed by the firm of Ernst & Ernst, Certified Public Accountants of Charleston. The completed audit, with accountants' report, follows:

ERNST & ERNST
716 Charleston National Plaza

To the Council
West Virginia State Medical Association
Charleston, West Virginia

We have examined the statements of assets, liabilities, and fund balances arising from cash transactions of the several funds of the West Virginia State Medical Association as of December 31, 1976, and December 31, 1975, and the related statements of revenues collected and expenses paid of the unrestricted funds, and changes in fund balances of the several funds for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As described in Note A, the Association's policy is to prepare its financial statements on the basis of cash receipts and disbursements; consequently, certain revenues and the related assets are recognized when received rather than when earned, and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the aforementioned financial statements present fairly the assets, liabilities, and fund balances arising from cash transactions of the several funds of the West Virginia State Medical Association at December 31, 1976, and December 31, 1975, and the revenues collected and expenses paid of the unrestricted funds and changes in fund balances of the several funds for the years then ended, on the basis of accounting described in Note A, which basis has been consistently applied.

ERNST & ERNST

Charleston, West Virginia
April 15, 1977

AUDITED FINANCIAL STATEMENTS (CASH BASIS) WEST VIRGINIA STATE MEDICAL ASSOCIATION

December 31, 1976

STATEMENTS OF ASSETS, LIABILITIES, AND FUND BALANCES, ARISING FROM CASH TRANSACTIONS

	DECEMBER 31	
	1976	1975
UNRESTRICTED FUNDS		
ASSETS:		
Cash	$111,659	$ 47,075
Certificates of deposit	78,212	78,212
Other assets	36	36
	$189,907	$125,323
LIABILITIES:		
Payroll withholdings	$ 1,093	$ 969
Due to restricted funds	8,024	9,069
FUND BALANCES:		
Operations	168,434	109,100
Designated for professional liability education	12,356	6,185
	180,790	115,285
	$189,907	$125,323
RESTRICTED FUNDS		
ASSETS:		
Cash	$ 35,383	$ 33,574
Certificates of deposit	7,805	7,805
Due from unrestricted funds	8,024	9,069
Investment in common stock	4,250	4,250
	$ 55,462	$ 54,698
FUND BALANCES:		
Medical scholarship	$ 51,212	$ 50,448
Endowment	4,250	4,250
	$ 55,462	$ 54,698

See notes to financial statements

STATEMENTS OF REVENUES COLLECTED AND EXPENSES PAID—UNRESTRICTED FUNDS

	Year ended December 31	
	1976	1975
REVENUES COLLECTED:		
Dues	$530,120	$345,463
Special assessment for professional liability education	6,170	6,530
Advertising	16,744	18,536
Interest	9,926	6,724
Contributions	4,998	5,346
Refund of expenses	1,899	3,019
Other revenues, including grants from endowment fund: 1976—$448; 1975—$646	9,473	12,940
	579,330	398,558
EXPENSES PAID:		
Dues remitted to AMA	292,250	132,155
Salaries and wages	77,043	72,447
Employee benefits	7,579	8,322
Taxes—payroll and other	3,678	6,314
Office rent	7,962	7,962
Office supplies and expenses	8,852	12,598
Telephone	4,683	4,934
Postage	8,381	5,155
Travel	24,323	25,676
Convention speakers and supplies	22,740	15,819
Publishing and printing	44,894	40,422
Expenses of professional liability education	—	345
Other expenses	11,440	8,763
	513,825	340,912
EXCESS OF REVENUES COLLECTED OVER EXPENSES PAID	$ 65,505	$ 57,646

See notes to financial statements

STATEMENTS OF CHANGES IN FUND BALANCES ARISING FROM CASH TRANSACTIONS

Year ended December 31, 1976, and December 31, 1975

		RESTRICTED FUNDS	
	Unrestricted Funds	Medical Scholarship Fund	Endowment Fund
Balance, December 31, 1974	$ 57,639	$49,798	$ —
Excess of revenues collected over expenses paid	57,646	—	—
Dues	—	8,892	—
Repayment of scholarships	—	1,000	—
Interest collected	—	1,723	—
Contributions	—	35	—
Scholarships to medical students	—	(11,000)	—
Restricted bequest	—	—	4,250
Dividends received	—	—	646
Grant to unrestricted funds	—	—	(646)
Balance, December 31, 1975	115,285	50,448	4,250
Excess of revenues collected over expenses paid	65,505	—	—
Dues	—	9,930	—
Repayment of scholarships	—	2,000	—
Interest collected	—	1,809	—
Contributions	—	25	—
Scholarships to medical students	—	(13,000)	—
Dividends received	—	—	448
Grant to unrestricted funds	—	—	(448)
Balance, December 31, 1976	$180,790	$51,212	$4,250

See notes to financial statements

NOTES TO FINANCIAL STATEMENTS
WEST VIRGINIA STATE MEDICAL ASSOCIATION

Year ended December 31, 1976, and December 31, 1975

NOTE A — PRESENTATION OF FINANCIAL STATEMENTS

The financial statements are presented using the cash basis of accounting. Therefore, certain revenues and the related assets are recognized when received rather than when earned, and certain expenses are recognized when paid rather than when the obligation is incurred. Office equipment and other capital expenditures are charged to expense at time of purchase.

The Association has designated a special assessment to be used for professional liability education. The funds are to be used to inform physicians about current and potential problems with malpractice insurance and are accounted for as unrestricted funds.

Investments received as a gift or bequest are stated at fair market value as of dates of grants.

The Association provides scholarships to students attending the School of Medicine of West Virginia University for the purpose of defraying expenses incurred by students. Under certain conditions, as set forth in the scholarship agreements, the scholarships are repayable to the Association in whole or in part. Scholarships to students and repayments are recorded as decreases and increases, respectively, in the medical scholarship fund balance.

NOTE B — LITIGATION

In 1975, a class action suit was instituted by a group of practitioners of Chiropractic Medicine against Blue Shield of Southern West Virginia and numerous other defendants which include the West Virginia State Medical Association. The suit alleges a violation of certain sections of the Sherman Act. This action was dismissed in the lower courts and is currently under appeal by the Plaintiffs.

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Pathology:
Fulvio Franyutti, M. D.

Surgery:
Hu C. Myers, M. D.
A. Kyle Bush, M. D.
J. W. Woodford, M. D.
A. Richard Weaver, M. D.

Gynecology and Obstetrics:
Raymond W. Cronlund, M. D.

Internal Medicine:
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B. G. Thimmappa, M. D.
Karl J. Myers, Jr., M. D.
Amitava Ghosal, M. D.

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RADIOLOGY:
F. H. Abdalla, M.D.
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PATHOLOGY:
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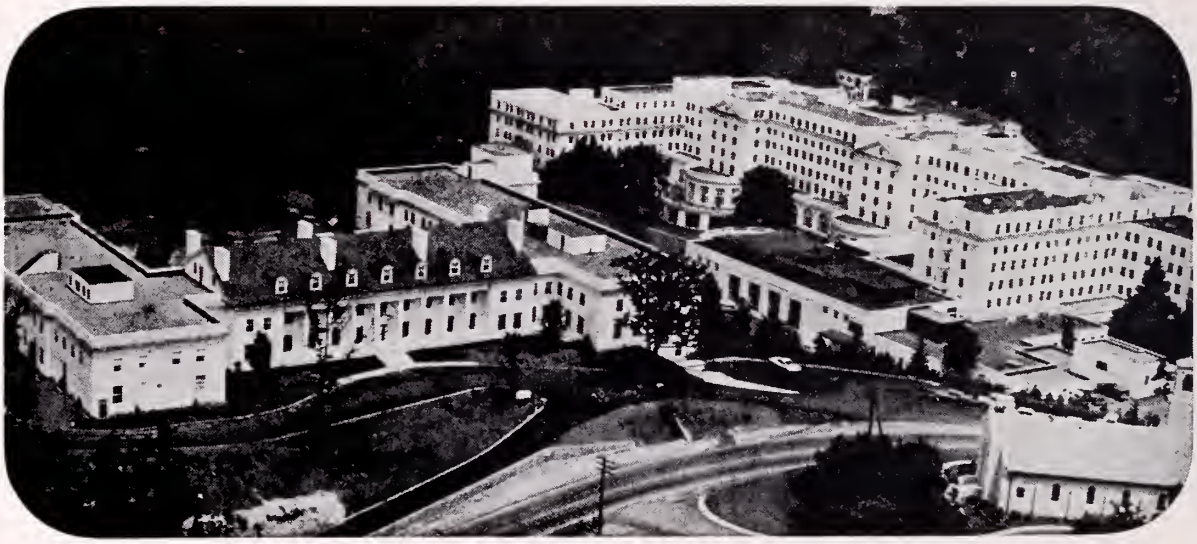

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Vol. 73 No. 7

The WEST VIRGINIA Medical Journal

Official Publication of the West Virginia State Medical Association

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CONTENTS

Scientific Articles

Selective Transcathether Embolization of A Renal Neoplasm: Report of A Case—Martin Wershba, M. D.; Paul Francke, M. D.; Lionel Nair, M. D.; and N. T. Shanmugham, M. D. 141

The Effects of High Efficiency Air Filtration System on Nighttime Asthma Attacks—Merle S. Scherr, M. D.; and Lorna W. Peck 144

Postpartum Emotional Disorders—David J. Withersty, M. D. 149

Scientific Department

Medical Grand Rounds from the West Virginia University Medical Center (Multiple Myeloma Management)—Edited by Raymond B. Weiss, M. D. 151

The President's Page

Does It Matter What You Call It? 156

Editorials

Quality Assurance 157
Amitriptyline and Prophylaxis of Migraine 158
More Family Doctors 158

General News

110th Annual Meeting 159
New Appointments at MU Medical School 160
Spring Meeting of Council 162
Doctor Smith Heads CME Program at WVU 163
WVU Medical Faculty Promotions 163
Doctor Zeedick Heart Association President 164
Governor's Conference on EMS 165
Doctor Point Joins WVU Charleston Division 165
Highest WVU Award Goes to Doctor Chambers 166

Special Departments

WVU Medical Center News vii
Third-Party News, Views, Program Concerns x
Obituaries xii
County Societies xiv
Review A Book xvi
Classified Section xxiii
Index To Advertisers xxiv

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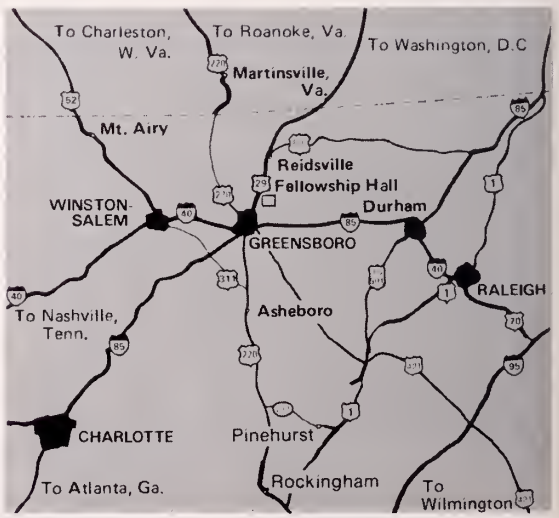

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WVU Medical Center
–News–

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Non-Profit Primary Care Clinics Ease Rural Doctor Shortage

Non-profit primary care medical clinics are helping to ease the physician shortage in rural West Virginia and may end it within the foreseeable future if the present trend continues.

So believes R. John C. Pearson, M. B., Chairman of the Department of Community Medicine.

The increase in the number of clinics during recent years gives validity to his optimism. In 1970, there were eight clinics; today there are 54, with an additional 20 either in the planning or development stage.

Doctor Pearson is more than a casual observer of the phenomenal spread of these community health facilities throughout the State. As Chairman of the Department of Community Medicine he is supervising a technical assistance program which includes a two-year study and analysis of the clinics. The cost of the project is being borne by grants totalling approximately $280,000 from the Claude Worthington Benedum Foundation and the Appalachian Regional Commission.

The principal investigator is Charles D. Holland, Coordinator of the Office of Health Services Research, Department of Community Medicine. Holland, former Executive Director of the West Virginia Regional Medical Program, has been actively involved as both a promoter and adviser for these clinics for the past seven years.

Also playing a vital role in the project are two Charleston-based staff members, Bill Copper and Beth High. They provide direct technical assistance to the clinics and relay information to WVU for computer analysis.

The WVU research group also works closely with the Committee on Rural Health of the State Medical Association.

Objectives of the program as outlined in the grants are: (1) an assessment of the need for additional services and facilities; (2) the development of modes and models for the effective delivery of such services; (3) the provision of technical assistance to existing and developing rural primary care clinics; and (4) the encouragement of state, federal and voluntary organizations and policies for the development and support of rural primary care resources.

The clinics are in operation or are being planned in 40 West Virginia counties. Because of the sparse population, the necessity of placing a clinic within a specific area is determined more by proximity and travel time than by an arbitrary patient-physician ratio or a county line.

Four Physicians Named Officers Of Psychiatric Branch

Four physicians in the Department of Behavioral Medicine and Psychiatry have been named officers in the 57-member West Virginia District Branch of the American Psychiatric Association (APA).

They are Dr. Donald C. Carter, President; Dr. William Hobbs, Secretary; Dr. Wilbur Sine, Treasurer, and Dr. Eddy Vincent, Newsletter Editor.

Doctor Carter is Professor and Coordinator of Undergraduate Education; Doctor Hobbs is Assistant Professor and Director of the Consultative Service; Doctor Sine is Assistant Professor and Director of the Outpatient Service, and Doctor Vincent is a third-year resident in the Department.

Doctor Carter's two-year term began May 3 during the annual APA meeting in Toronto, Canada. He succeeds Dr. Florence K. Hoback of Huntington as President.

Elected To Immunology Group

At its recent annual meeting in Chicago, the American Association of Immunologists conferred membership on Robert Veltri, Ph. D., Professor of Microbiology and Otolaryngology. The election recognizes immunology research productivity. Doctor Veltri's work has contributed to understanding the immunologic cause of the inner ear disease known as otitis media and to identification of antigens in lung cancer.

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Third-Party News, Views and Program Concerns

New Labeling, Patient Information Requirements For IUDs

The Food and Drug Administration recently established new labeling requirements for intrauterine birth control devices (IUDs), including a requirement that women be provided with an easily understood brochure before the IUD is inserted.

The brochure describes the uses and possible risks associated with IUDs and is designed to assist each woman in determining if the IUD contraceptive method is appropriate for her.

The regulations also establish, for the first time, uniform physician labeling for all types of IUDs.

Effective November 7

The requirements take effect November 7, 1977. IUDs are used for contraception by an estimated 3 million women in the United States.

The new IUD labeling is part of a continuing information about prescription contraceptive products.

The FDA, in 1970, began requiring that special patient information be provided for women who take birth control pills. Last December the Agency proposed regulations which would update this information and also require that a patient brochure be given by the physician or pharmacist each time a prescription for birth control pills is written or re-filled.

FDA Commissioner Donald Kennedy said that "choosing a proper contraceptive is a very personal choice, and FDA does not advocate any particular form of contraception.

"Our goal," he said, "is to make sure that each woman and her physician have enough information to select the most suitable method of contraception."

Commissioner Kennedy added: "We encourage women to look for and request these new brochures on IUDs when they become available later this year. We will require manufacturers to print patient brochures in quantities larger than the number of IUDs produced, so that this information can be readily available in clinics, physicians' offices and health facilities."

Patient Brochure

The patient brochure describes the IUD, how effective it is, what a woman should discuss with her doctor before the IUD is inserted, how to check to see if the IUD is still in place and what to do if it is not, what side effects may occur, what adverse effects to report to the doctor, and what can happen if pregnancy occurs with the IUD in place.

The regulations require that physicians give women an opportunity to read the brochure and ask questions before deciding to have the IUD inserted.

The required information directed to the physician must include instructions about inserting the IUD, under what conditions removal should be considered, what may go wrong during use, and when an IUD should be replaced or not used at all.

Aerosol Container Warning Labels Effective November 1

The Food and Drug Administration (FDA) and the Consumer Product Safety Commission (CPSC) have announced plans to insure that products in aerosol containers using chlorofluorocarbon gases as the propellant carry this label: "Warning: Contains a chlorofluorocarbon that may harm the public health and environment by reducing ozone in the upper atmosphere."

The FDA is issuing a final regulation to require that this warning label appear on all food, drug, and cosmetic containers propelled with chlorofluorocarbons initially shipped in interstate commerce after October 31, 1977.

The CPSC is proposing a regulation to require the same warning label on household and other products under its regulatory jurisdiction. The warning label is intended by both agencies to be the first step in a government-wide program to end the use of most aerosol products propelled by chlorofluorocarborns. The second step will be a mandatory phase-out program for all nonessential aerosols propelled by chlorofluorocarbons.

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Obituaries

FRANCIS J. GAYDOSH, M. D.

Dr. Francis J. Gaydosh of Wheeling died on May 9 at his home there. He was 59.

Doctor Gaydosh had practiced internal medicine and cardiology in Wheeling for 30 years. He was a staff physician at Wheeling Hospital and Ohio Valley Medical Center, Inc., in Wheeling.

He was a Past President of both the West Virginia Heart Association and the Wheeling Heart Association.

Honors bestowed on Doctor Gaydosh during his life were numerous and included several for his volunteer service with the heart associations. The Wheeling City Council, on May 10, passed a resolution in tribute to his memory.

Doctor Gaydosh was current President of the West Virginia Blue Shield (West Virginia Medical Services, Inc.) at the time of his death.

A native of Wheeling, Doctor Gaydosh was graduated from West Virginia University and received his M. D. degree in 1942 from Temple University School of Medicine. He served his internship and residency in internal medicine at Philadelphia General Hospital, followed by two years of practice in internal medicine at the Mary Black Clinic in Spartanburg, South Carolina. He established his practice in Wheeling in 1947.

Doctor Gaydosh was a member of the Ohio County Medical Society, the West Virginia State Medical Association, the American Medical Association, the Society of Internal Medicine, the American Diabetes Association and the American Heart Association.

Survivors include the widow; three daughters, Mrs. Terry Britt of Wheeling, Mrs. Thomas Vorhees, Tipton, Iowa, and Jolie Gaydosh, at home; a son, Michael C. Gaydosh of Wheeling; one brother, Dr. Michael A. Gaydosh, Jr., of Wheeling; and two sisters, Dr. Anne Gaydosh Hughes, wife of Dr. Boland Hughes, of Bryn Mawr, Pennsylvania, and Mrs. Scholastica Gaydosh Yurchak of Valencia, New Mexico.

* * *

JAMES W. STOKES, M. D.

Dr. James W. Stokes of Hinton, Summers County Coroner, died on May 28 in Orangeburg, South Carolina, while visiting his sister. He was 78.

Doctor Stokes, a native of Springfield, South Carolina, had practiced in Hinton since 1925.

He was a former President of the Summers County Medical Society and twice served as Secretary.

A veteran of World War I, Doctor Stokes received his M. D. degree in 1924 from Vanderbilt University School of Medicine.

He was a member of the Summers County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the sister, Mrs. Ann Latta of Orangeburg; a son, James W. Stokes, Jr., of Bay Side, California; and a daughter, Mrs. Eleanor Agard of Whittier, California.

* * *

RAPHAEL J. CONDRY, M. D.

Dr. Raphael J. Condry of Elkins died on May 21 in a hospital there. He was 75.

An Elkins physician since 1929, Doctor Condry was a member of Davis Memorial (Hospital) Associates.

He was a former member of the West Virginia State Medical Association. A native of Buckhannon, he was graduated from West Virginia University and received his M. D. degree in 1927 from the University of Maryland School of Medicine. He also was a former member, and twice served as President, of the Tygart's Valley Medical Society.

Survivors include the widow; four brothers, Dr. John Condry of Florida, Dr. James Condry of Silver Spring, Maryland; Mark B. Condry of Parkersburg, and Joseph P. Condry of Charleston; and a sister, Mrs. Robert Gressang of Charleston, South Carolina.

Progress Made In Coping With Alcoholism

Real progress is being made in mobilizing the nation to deal with alcoholism, says the newly revised *Manual on Alcoholism* of the American Medical Association.

Within the medical profession there is growing awareness that alcoholism is indeed an illness, a serious one, the Manual declares.

"Physicians recognize that all patients (including alcoholics) are sick persons whose total conditions have many aspects and broad ramifications. Genuine promise can be seen in the remarkable upsurge in research effort, which is bringing us new ideas, fresh approaches and deeper insights. Intensive treatment centers for alcoholic patients are springing up across the country."

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County Societies

CABELL

The Cabell County Medical Society met on May 12 at the Gateway Inn in Barboursville.

Dr. Charles Litvack, Associate Professor of Urology at the University of Kentucky in Lexington, gave a very interesting talk on the prostate.—Walter W. Jones, M. D., Acting Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on May 3 at the Old Mill Club in Morgantown.

The scientific program was presented by William W. Fleming, Ph. D., Professor and Chairman of Pharmacology at the West Virginia University School of Medicine. His talk on "Drug Interactions" was well received.

Dr. Isaiah A. Wiles noted that Dr. George Pickett, the son of Dr. Justus C. Pickett of Morgantown, currently is heading the American Public Health Association.—Barbara Jones, M. D., Secretary.

MERCER

The Mercer County Medical Society met on May 23 at the Dinner Bell Restaurant in Princeton.

The speaker was Dr. John J. Mahood of Bluefield, President of the West Virginia State Medical Association. Doctor Mahood presented to the Society some thoughts on the practice of medicine and his experiences in West Virginia. His remarks were well received by the Society.—David F. Bell, Jr., M. D., Secretary-Treasurer.

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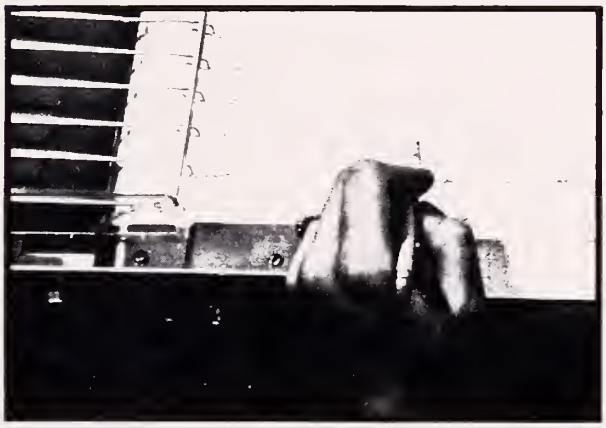

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Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Obstetric & Gynecologic Diagnosis Treatment, by Ralph C. Benson, M. D., and associate authors. 912 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1976.

Current Medical Diagnosis & Treatment, by Marcus A. Krupp, M. D., and Milton J. Chatton, M. D., and associate authors. 1,066 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1977.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

American Drug Index, by Norman F. Billups, Ph. D., R. Ph. 735 pages. Price $14.50. J. B. Lippincott Company, Philadelphia. 1977.

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AUGUST
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Official Publication of the West Virginia State Medical Association

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Microfilm editions beginning with the 1972 volume are available from University Microfilms, Inc., 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

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CONTENTS

Scientific Articles

Malignant Melanoma: Prognostic Factors and Therapeutic Results—Vincent T. DeVita, Jr., M. D.; and Richard I. Fisher, M. D. 167
Hemorrhagic Diathesis and Surgery—A. F. Aburahma, M. D. 173
Subcutaneous Mastectomy with Immediate Replacement by a Silastic Implant—Ghassan A. Khalil, M. D. 179

The President's Page

Adieu—John J. Mahood, M. D., President, W. Va. State Medical Association 186

Editorials

A Call to Arms—'Get Involved!' 187
August and Dog Days 188
The Proper Goal: Good, Sufficient Care 189

General News

Annual Meeting Program Completed 190
Continuing Education Activities 195
New Association Members 196
Proposed Amendment to Constitution 197
Auxiliary To Hold 53rd Annual Meeting 198
Association Awards Four WVU Scholarships 200
Review a Book 202
Dr. Russel Kessel, Past President, Dies 203
Convention Program 205
A Word of Thanks 208
1977 Program Committee 209
Delegates and Alternates 210
Auxiliary Program 212
Scientific Exhibits 214
Annual Reports 216

Special Departments

WVU Medical Center News viii
Third-Party News, Views, Program Concerns x
Obituaries xii
County Societies xiv
Book Review xv
Classified Section xix
Index To Advertisers xx

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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Cesarean Section Site Moved To Delivery Room Area

A change designed to save time in obstetrical emergencies and provide the most prompt and efficient care for the infant delivered by cesarean section was to be implemented by WVU Hospital early last month. Charles White, M. D., Professor and Chairman of Obstetrics and Gynecology, said that cesarean sections, formerly performed in the third-floor operating room, will be done in the fourth-floor delivery room area. He added that tubal ligations also would be performed on the fourth floor.

Roland Kennedy, M. D., who was to join the faculty of the WVU School of Medicine on July 1 as Professor of Anesthesiology, has a special interest in obstetrical anesthesia and will have responsibility for that area.

"Because University Hospital is a regional center for perinatal care, we have a high incidence of pregnancies where the infant is at high risk. The immediate adjacency of the Newborn Intensive Care Unit, with its sophisticated life-support systems and highly trained staff, is a prime factor in making the move," Doctor White said.

"We feel we will have the capacity to cope with obstetrical emergencies in a matter of minutes," he added, pointing out that not only would time previously spent in moving the patient be saved, but the question of operating room availability would be resolved to a greater extent.

Shown following the West Virginia University School of Medicine investiture ceremony this spring at the Creative Arts Center are (from left), Drs. John A. Thomas and David Z. Morgan, professors and associate deans; Dr. John P. McGovern, Director-Consultant, McGovern Allergy Clinic and Texas Allergy Research Foundation, Houston; and Dean John E. Jones, M. D., presenting a special plaque to Doctor McGovern, the investiture speaker. "On the Oslerian Way" was the address topic.

Cardiologists Present Ultrasonic Research Results In Kentucky

Two cardiologists from the Department of Medicine presented results of their ultrasonic research to scientists from Ohio, Pennsylvania, New York, Kentucky and Michigan attending the annual meeting of the Ohio-Genesee Valley Cardiology Group in June in Lexington, Kentucky.

Hiroaki Asato, M. D., Assistant Professor, described his work on mitral leaflet prolapse syndrome, a disease caused by a specific degeneration of the cardiac valves and often manifested by abnormal heart sounds and murmurs. More than 100 patients with this problem have been studied at WVU. In the past, severity or progression of the disease could only be determined precisely with cardiac catheterization, a costly and sometimes painful procedure. Doctor Asato has been able to relate severity and progress of this rare disease to specific findings produced by echocardiography, a safe and inexpensive diagnostic procedure. His co-investigators in the study were Drs. Allen F. Bowyer and Abnash Jain, professors of medicine (cardiology).

Doctor Bowyer, whose study co-investigators were Doctors Jain and Asato, discussed a new technique to determine accurate left ventricular measurements by echocardiography in normal and heart-diseased patients. Left ventricular function is an important factor in the prognosis of heart disease. The research trio's new computer method uses echocardiography to produce rapid, more accurate determinations of ventricular functions without the need for cardiac catheterization.

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Third-Party News, Views and Program Concerns

Specialty, Other Physician Groups Financing Claims Studies

Highly respected statistical studies of medical professional liability claims by the National Association of Insurance Commissioners (NAIC) will resume under a new program of financial support being coordinated by the Council of Medical Specialty Societies (CMSS). Funding will occur principally through voluntary grants from CMSS member societies, and from physician-owned professional liability companies.

The NAIC Closed Claims Malpractice Study was initially undertaken in 1975 and was co-funded by the NAIC and insurance companies. It was discontinued after one year due to withdrawal of financial support by the insurance companies.

Under terms of a CMSS proposal accepted by the NAIC on June 10, continuation of the NAIC Closed Claims Malpractice Study was to begin July 1. The issuance of study quarterly reports, of which four have been published to date with the last covering the period ending June 30, 1976, will resume as soon as practical. The first study analyzed 25,000 claims closed during a 12-month period beginning July 1, 1975.

Richard S. Wilbur, M. D., CMSS Executive Vice President, has announced that, as of June 10, approximately $160,000 of the projected $215,600 needed for a year of study continuation had already been pledged, with the majority coming from the Council's member societies and a portion of the remainder from physician-owned professional liability companies.

The first voluntary pledge received came from the American Academy of Orthopaedic Surgeons. Since that time numerous contributions have come from a majority of CMSS member societies. Pledges have also been received from the American Hospital Association and the American Medical Assurance Company, which is the AMA-owned casualty insurance company.

Doctor Wilbur stated that the CMSS proposal for study continuation was based on the firm belief that the $60,000 still needed will be realized from grants now under consideration. The NAIC has budgeted an estimated $84,000 for data collection, processing, personnel, and related services.

A closed claim, as defined by the NAIC study, is a settled item on the medical professional liability books of various U. S. insurance companies, with or without payment of a claim. The NAIC study provides information regarding the nature of the injury, the location (hospital, clinic, office), circumstances, the claimant, the defendant, the settlement, the specialty of the involved practitioner, and other pertinent data.

According to Doctor Wilbur, "the statistical information derived from this approach should be of great value in the future to both the medical profession and the insurance industry."

"A major impediment to solving the serious medical liability problem has been the lack of statistically valid data. Essentially, the objective of the study is to gather facts on what went wrong and why it went wrong," he said. "Then, our component societies participating in this project will work with their members, through continuing education programs aimed at patient safety and risk management, to help prevent the types of incidents that lead to many claims."

Referrals In Testicular Cancer Requested For NCI Study

The cooperation of physicians is requested in the referral of patients with bulky Stage II or Stage III non-seminomatous testicular cancer for a study being conducted by the Surgery Branch, National Cancer Institute, at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Intensive chemotherapy with or without reductive surgery is being evaluated in patients with bulky disease that has metastasized to the retroperitoneum or lungs.

To refer a patient or to obtain further information, please write or call: Dr. Nasser Javadpour, Surgery Branch, National Cancer Institute, Clinical Center Room 10N218, National Institutes of Health, Bethesda, Maryland 20014 (Telephone: 301-496-3351).

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Obituaries

NORVELL L. HAISLIP, M. D.

Dr. Norvell L. Haislip, retired Wheeling radiologist, died on May 29 in a Wheeling Hospital. He was 77.

A native of Grafton, Doctor Haislip held A. B. and B. S. degrees from West Virginia University. He received his medical degree in 1928 from Harvard Medical School.

Doctor Haislip served his internship and residency at Ohio Valley General Hospital in Wheeling and did postgraduate work in electrocardiology at Case Western Reserve University.

He was a member of the Radiological Society of North America and the Southern Medical Association, and an honorary member of the Ohio County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; a son, Jay R. Haislip of Cherry Hill, New Jersey, and a daughter, Mrs. Sally Hutchinson of Fairfax, Virginia.

* * *

DAVID BRESSLER, M. D.

Dr. David Bressler of Fairmont died in a hospital there on June 5. He was 66.

Doctor Bressler had practiced medicine at two offices—in Fairmont and Monongah—since 1943. Before entering private practice, he was a physician with Consolidation Coal Company.

He was a former Chief of Staff at Fairmont General Hospital.

A native of Paterson, New Jersey, Doctor Bressler was graduated from New York University and received his M. D. degree in 1939 from Dalhousie University Faculty of Medicine in Halifax, Nova Scotia, Canada.

He was a member and Past President of the Marion County Medical Society, and a member of the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; three daughters, Mrs. Edmond Swiger of Pittsburgh, Mrs. Gerald Tulino of Tucson and Faith Ann Bressler of San Francisco; one brother, Maurice Bressler of Clifton, New Jersey; and one sister, Mrs. Rhoda Libow of Paterson.

DONALD S. GROVES, M. D.

Dr. Donald S. Groves of Summersville drowned on June 26 in Summersville Lake. He was 54.

State police said Doctor Groves apparently fell from an upper deck of a house boat and struck his head on a railing and then fell into the lake.

Doctor Groves, who practiced in Summersville for 20 years, was Nicholas County Health Officer and former Chief of Staff at Summersville Memorial Hospital.

He completed his undergraduate work at West Virginia University and received his M. D. degree in 1956 from WVU and the Medical College of Virginia. He interned at Charleston Memorial Hospital.

A veteran of World War II, Doctor Groves previously was located at Craigsville in Nicholas County.

He was a member and a Past President of the Central West Virginia Medical Society, and a member of the West Virginia State Medical Association and the American Medical Association.

Survivors include the widow; two sons, Dr. Gary Groves of Buckhannon and Dwight Groves of Morgantown; a daughter, Patricia Groves, at home; the mother, Mrs. Mary S. Groves of Summersville; four brothers, Paul and Dana W. Groves, both of Summersville; David Groves of Belle and Otis Groves of Orlando, Florida; and a sister, Mrs. Joan Parsons of Lorain, Ohio.

* * *

WILLIAM B. WRIGHT, M. D.

Dr. William B. Wright of Burnt House, in Ritchie County, died on July 5 in a Clarksburg Hospital. He was 70.

A native of Lawford, in Ritchie County, Doctor Wright had practiced previously in Sistersville and Clarksburg.

He was a former member of the Harrison County Medical Society and the West Virginia State Medical Association.

Doctor Wright was a graduate of Glenville State College and West Virginia University, receiving his M. D. degree in 1934 from Louisiana State University School of Medicine.

A veteran of World War II, he is survived by one son, Robert Wright of Arnoldsburg.

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County Societies

CABELL

The Cabell County Medical Society met on June 9 at the Gateway Inn in Barboursville.

Dr. John J. Mahood of Bluefield, President of the State Medical Association, was the guest speaker.

The scientific speaker was Dr. James P. Boland of Charleston, whose topic was "The Relationship of Community Health Centers to Rural Hospitals." Doctor Boland is Professor and Chairman, Department of Surgery, Charleston Division/West Virginia University Medical Center.—James R. Cook, M. D., Secretary.

* * *

MONONGALIA

The Monongalia Medical Society met on June 7 at the Lakeview Inn and Country Club near Morgantown.

The scientific program was presented by Dr. K. Douglas Bowers, Jr., Clinical Associate Professor of Orthopedic Surgery at the West Virginia University School of Medicine. His talk was entitled "Football Injuries and Astroturf."

The president of the State Medical Association will be our guest for the September 6 meeting which will be held at the Lakeview Inn and Country Club. An invitation also will be extended to the Preston County Medical Society.—Barbara Jones, M. D., Secretary.

* * *

CENTRAL WEST VIRGINIA

The Central West Virginia Medical Society met on June 16 at the home of Dr. and Mrs. Charles T. Lively in Weston.

Among other items of business, the Society:

Nominated Dr. Paul R. Bennett of Webster Springs to replace Dr. Louis W. Groves, Jr., on the State Medical Association's Council at the expiration of Doctor Groves' term, discussed proposed amendments to the State Association By-laws, reviewed a list of physician assignments to state legislators, voted to provide a scholarship of $80 for Camp Kno Koma, and heard a letter read from Mr. Herbert Sharp, Vice President for Development of West Virginia Wesleyan College, thanking the Society for its contribution of $100 to the nursing department.—Joseph B. Reed, M. D., Secretary.

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Book Review

CURRENT PEDIATRIC DIAGNOSIS AND TREATMENT, 4TH EDITION — C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. Lange Medical Publications, Los Altos, California. Illustrated. 1,053 Pages. 1976. Price $15.

This book was written by people who were or are connected with the University of Colorado. The principal authors put together a very useful book. The first seven chapters deal with basic pediatrics. The chapter on the history and physical examination is an excellent review. It contains many helpful and practical pointers. The chapters on growth and development, newborn care, adolescence, nutrition, and immunizations are good. The chapter on ambulatory pediatrics is excellent for its practical approach to the types of pediatrics patients that are seen. Again, the practical pointers in this chapter are good.

This book includes some more commonly seen entities which are not usually described in other textbooks. For example, the chapter on skin describes calluses and corns; and the chapter on ears, nose, and throat has a section on piercing of ears. The chapters on the respiratory and cardiovascular systems include a brief, concise review of physiology and physical diagnosis. The chapter on poisoning is excellent. It includes a review of basic toxicology and lists and discusses some of the more common poisonings. The last six chapters deal with diagnostic and therapeutic modalities.

I highly recommend this book for family practitioners, emergency medicine physicians, and pediatricians. It gives a comprehensive, but not encyclopedic, picture of the field of pediatrics. Also, each section has a list of references for in-depth study. I think this book is a bargain for $15.—W. F. Daniels, Jr., M. D.

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SEPTEMBER
1977

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CONTENTS

Scientific Articles

Multiple Myeloma, A 'B' Cell Blood Dyscrasia—Vicente Anido, M. D.; and Gary Marcus, M. D. 221

Testicular Torsion in Neonates—Tara C. Sharma, M. D.; Harold N. Kagan, M. D.; and John P. Sheils, M. D. 226

Scientific Department

Medical Grand Rounds from the West Virginia University Hospital (Pericarditis)—Edited by Raymond B. Weiss, M. D. 229

The President's Page

Another Association Year—Joseph A. Smith, M. D., President, W. Va. State Medical Association 236

Editorials

Lobbyists 237

Onward, Upward—Or Somewhere 237

Estrogen Receptor 239

General News

Eleventh Mid-Winter Clinical Conference 240

New WVU Medical School Class 241

Third Annual WVU Pediatric Day 242

Charleston Emergency Care Seminar 243

Cardiac Life Support Course 244

Hearing, Speech Group Elects State Doctor 244

Continuing Education Activities 245

Doctor Pickett New State Health Director 246

WVU Medical Education Building Dedication 247

Hal Wanger Family Practice Conference 248

Prophylactic Antibiotics Conference 249

Allergy Workshop—Primary Care Physicians 249

Obstetrics-Gynecology Workshop 250

Safe Drinking Water Act Outlined 250

1977 AAFP Scientific Assembly 251

Special Departments

WVU Medical Center News x

Third-Party News, Views, Program Concerns xii

Obituaries xiv

Review A Book xvii

Classified Section xxi

Index To Advertisers xxii

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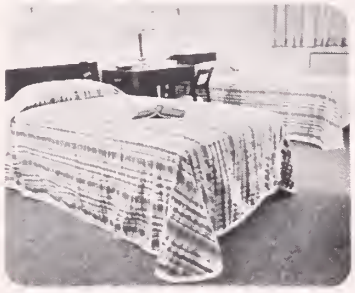

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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

WVU Family Practice Unit Adds Two Doctors

Two additional physicians have been named to the faculty of the Department of Family Practice, West Virginia University School of Medicine.

Angel M. Vazquez, Professor, comes to WVU from Tacoma, Washington, where he was Chief of the Department of Family Practice at Madigan Army Medical Center.

Holding both B. S. and M. D. degrees from the University of Puerto Rico, he served his internship at Ohio Valley General Hospital in Wheeling, a residency in pediatrics at William Beaumont Army Medical Center, and a fellowship in pediatric endocrinology at the University of Pittsburgh.

Besides his service at Madigan and several other army hospitals in this country, Doctor Vazquez was Commander of the 61st Medical Battalion and 8th Field Hospital in Vietnam.

A charter fellow of the American Academy of Family Physicians, he is also a Fellow of the American Academy of Pediatrics and holds membership in a number of other professional societies.

Janice M. Flaherty, Assistant Professor, is a graduate of Indiana (Pennsylvania) State College and Creighton University School of Medicine. She received her postgraduate training at Altoona Hospital and at St. Margaret Memorial in Pittsburgh.

She has been in private practice in Indiana, Pennsylvania, for the past four years.

A Diplomate of the American Board of Family Practice and a Fellow of the American Academy of Family Physicians, Doctor Flaherty is a member of the American Women's Medical Association. She has served on the boards of the Indiana County chapters of the American Cancer Society and the Pennsylvania Mental Health Association.

Additional Grants Listed For WVU Programs

Here is a partial list of additional grants received by West Virginia University for a wide range of programs and services:

From the American Cancer Society, a two-year, $35,000 institutional research grant effective through June 30, 1979, primarily to enable investigative scientists to initiate promising projects which do not receive support through other sources.

A total of $102,609 from the National Institue of Mental Health to support undergraduate and basic residency programs in psychiatry.

A $12,823 grant from the Fogarty International Center for research on the source of nervous system ATP.

A $31,118 grant from the National Heart, Lung and Blood Institute to continue research on serum triglycerides and vascular diseases.

An amount totaling $42,200 from the National Institute of Arthritis, Metabolism and Digestive Diseases to continue research on hormonal regulation of gluconeogenesis (the formation of glucose by the liver from noncarbohydrate sources).

A $35,684 grant from the National Heart, Lung and Blood Institute to continue pulmonary immunology research.

A $4,000 grant from the Atlanta Center for Disease Control's Bureau of Health Education to defray part of the cost of the committee's program of venereal disease prevention through education.

Fourth-Year Students Study In Charleston, Wheeling

Sixteen fourth-year students in the West Virginia University School of Medicine received clinical training in July and August at either the Charleston Area or Ohio Valley medical centers. Ohio Valley is in Wheeling.

This was the second four-week bloc of clinical rotation for the students, whose final year in the School of Medicine began on July 1.

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Third-Party News, Views and Program Concerns

FDA Commissioner Kennedy Calls Laetrile "Fraud"

Food and Drug Administration (FDA) Commissioner Donald Kennedy has said that cancer patients who buy laetrile "are being victimized twice—once by their disease and once by the profiteers."

Doctor Kennedy called laetrile—the so-called cancer "cure" being sold and promoted across the country—a "fraud" that lacks any evidence of effectiveness.

FDA recently finished an exhaustive review of all evidence about laetrile, including materials submitted by its proponents, and has concluded it is not generally recognized by medical experts as being a safe and effective cancer treatment, Doctor Kennedy said.

"To the contrary, all of the evidence shows that both now and in the past laetrile has been regarded by the overwhelming majority of qualified experts as being of unproved safety and of no effectiveness whatsoever," he said.

Doctor Kennedy made his observations in testimony before the U. S. Senate Subcommittee on Health and Scientific Research, as it held hearings on laetrile.

The statement by Doctor Kennedy was his strongest denunciation of laetrile since becoming Commissioner of FDA in April.

Doctor Kennedy dealt with the "freedom of choice" issue—in which laetrile proponents have argued that patients should be able to select whatever medical treatment they want, whether it works or not.

With regard to the issue of "freedom of choice," Doctor Kennedy said: "I do not believe that anyone has the right to debase the concept of freedom by swindling those who are desperate for their lives. I do not believe that we should permit laetrile to destroy a drug efficacy system that ensures free, informed choice among products that work. The 'freedom' to promote laetrile ultimately destroys every citizen's right to make intelligent choices."

Doctor Kennedy compared the current laetrile movement with previous efforts to promote false cancer cures. In the 1940s and 1950s, a physician "successfully promoted one of the great medical hoaxes of all times," he said, in which 3,000 health practitioners across the country were charging as much as $300 an injection.

Later, the treatment was given to more than 10,000 people at a cost of $400 each. Its sale was stopped in the United States in 1960, after ten years of litigation, but is still available in Mexico.

In the late 1950s and early 1960s, krebiozen was promoted as a cancer cure. Its promoters were indicted for fraud and conspiracy.

Doctor Kennedy said: "What is different about laetrile? The short answer is: not very much. The pattern of promotion is similar: its advocates rely heavily on castigation of the medical and scientific establishment and emphasize the 'freedom of choice' of patients, the support of a few major public figures, and the obviously sincere conviction of cancer patients and their relatives who feel they have been helped by the treatment."

He added, "Because it is such a dreaded and baffling disease, cancer has always been a seed bed for quackery. Some of the supposed remedies have had an air of plausibility; others are so outlandish that it seems incredible that people once believed in them. In its 70-year history, FDA has put hundreds of such 'cures' out of business.

"About every decade, however, one of them takes hold in a convincing enough way to attract a large following, and then it becomes a public health problem because significant numbers of people forego other treatment to rely on it."

The Commissioner pointed out there is a significant difference among laetrile proponents themselves about what laetrile is. "Laetrile as it is offered for sale in the treatment of cancer is not one preparation, but several different ones," Doctor Kennedy said. "These differences in identity relate to shifting theories that attempt to explain the alleged anti-cancer activity of the drug or drugs."

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Obituaries

O. D. MacCALLUM, M. D.

Dr. Oldrick Daniel MacCallum, who practiced in Madison, Boone County, for 30 years, died July 30 in a Charleston hospital. He was 67.

A native of Newdale in Manitoba, Canada, Doctor MacCallum received his undergraduate and medical education at the University of Manitoba, and completed a surgical residency at Charleston General Hospital after coming to West Virginia in 1940.

He was a member of the Boone County Medical Society, the West Virginia State Medical Association and the American Medical Association; and a Fellow of the American College of Surgeons and the International College of Surgeons.

Doctor MacCallum, who was Chief of the Medical Staff at Boone Memorial Hospital, was a Past President of the Boone County Cancer Society, and the Madison Lions Club. Survivors include the widow; a daughter; four sons, and three grandchildren.

Medicaid Doctors Work Harder And Earn Less, AMA Reports

Medicaid doctors may work harder and earn less money than physicians who treat relatively few Medicaid patients, an American Medical Association study reveals.

An analysis of data from the AMA's Tenth Periodic Survey of Physicians, a random sample of 5,288 physicians practicing in the United States, determined that physicians with a higher proportion of Medicaid-eligible patients in their practices earned an average of $51,283 in 1974, while physicians treating fewer Medicaid-eligible patients had an average net income of $53,142.

Also, physicians with high Medicaid-eligible practices reported an average of 139.6 patient visits per week, while doctors seeing few Medicaid-eligible patients averaged 128 visits per week.

The statistics are contained in the new 1977 edition of *Profile of Medical Practice*, which together with the new 1977 edition of a companion book, *Reference Data on the Socioeconomic Issues of Health*, serves as a quick reference guide for health professionals, policymakers, researchers and journalists. Each brings together in one convenient source a combination of relevant essays and data.

St. Louis Physician Named AMA Foundation Head

Hubert A. Ritter, M. D., St. Louis, has been named President of the American Medical Association Education and Research Foundation.

A member of the AMA Board of Trustees, Doctor Ritter is Past President of the St. Louis Medical Society and is a faculty member of St. Louis University School of Medicine.

Doctor Ritter's new office gives him responsibility for the AMA-ERF medical education assistance programs that have provided more than a million dollars a year in direct grants to medical schools over the past 28 years, and have arranged and guaranteed more than $77 million dollars in student loans during the last 15 years to assist medical students and physicians in training. The AMA-ERF also offers a limited number of scholarship grants to seniors.

Hoyt D. Gardner, M. D., of Louisville, Kentucky, was named Vice President of AMA-ERF, and John J. Coury, M. D., of Port Huron, Michigan, was named Secretary-Treasurer.

A navy veteran, Doctor Ritter is a 1948 graduate of St. Louis University School of Medicine. He is board certified in obstetrics and gynecology.

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Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Medical Diagnosis & Treatment, by Marcus A. Krupp, M. D., and Milton J. Chatton, M. D., and associate authors. 1,066 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1977.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

General Ophthalmology, 8th Edition, by Daniel Vaughan, M. D., and Taylor Asbury, M. D. 379 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1977.

Handbook of Obstetrics & Gynecology, 6th Edition, by Ralph C. Benson, M. D. 722 pages. Price $9.50. Lange Medical Publications, Los Altos, California 94022. 1977.

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Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

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Vol. 73 No. 10

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CONTENTS

Scientific Articles

Presidential Address—John J. Mahood, M. D. 253
Simple Hysterectomy is Inadequate Therapy for Invasive Cervical Cancer—Josh C. Tunca, M. D.; and O. E. Dement, M. D. 255
1977 Student Research Convocation, West Virginia University School of Medicine 258

Special Report

Merits of a Pediatric Specialty—One Opinion—Ellen Hrabovsky, M. D. 263

The President's Page

Cooperation with Reason—Joseph A. Smith, M. D., President, W. Va. State Medical Association 266

Editorials

Laetrile 267
The Use of Aspirin 267

General News

Dr. Joseph A. Smith Assumes Presidency 269
Bylaws, Constitution Amended 272
Committee Appointments 274
Affiliated Societies Elect Officers 276
Eleventh Mid-Winter Conference 277
Continuing Education Activities 279
Mrs. Joseph T. Mallamo Heads Auxiliary 280
WVU Medical Education Building Dedication 282
Wheeling Immunology-Rheumatology Program 283
Council Hears State Officials 284
Philips Roxane Another Contributor 286

Special Departments

WVU Medical Center News x
Third-Party News, Views, Program Concerns xii
Obituaries xiv
Resolutions xvi
Necrology Report xix
Classified Section xxiii
Index To Advertisers xxiv

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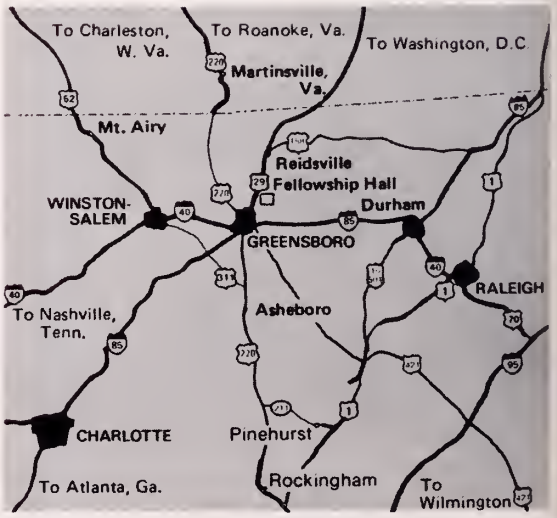

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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Dr. Marshall W. Ashby Kidney Transplant Surgeon

Dr. Marshall W. Ashby has been appointed kidney transplant surgeon at the West Virginia University Medical Center.

Doctor Ashby, a graduate of Howard University College of Medicine in Washington, D. C., will be an Assistant Professor of Surgery on the WVU School of Medicine faculty and Head of the Section on Renal Transplantation.

WVU Hospital is the only one in West Virginia where kidney transplants have been available. A dozen of the operations were performed there between 1972 and 1975.

Dr. Alvin L. Watne, Chairman of the Department of Surgery, said he was "very pleased to have such a well-trained surgeon join our faculty and to be able once again to make this valuable service available to the people of West Virginia."

Two tiny wires that extend from the cast on Elsie Roberts' right leg allow Robert N. Clark, M. D., (left) to measure the amount of current supplied by an encased battery pack into small metal rods inserted in her ununited femur. The treatment, called Direct Current Bone Growth Stimulation, is designed to help mend bone fractures that for reasons unknown have not healed within a reasonable length of time. Mrs. Roberts, of Key West, Florida, came for her care to West Virginia University Hospital. Doctor Clark, Professor and Chairman of Orthopedic Surgery at WVU, is one of 10 surgeons in the United States and Canada selected to carry out further studies of the treatment.

Doctor Ashby, 47, a native of Lorain, Ohio, was in private practice of general survery in Cleveland from 1965 to 1975.

He spent the past two years in a Transplant Fellowship with Dr. Samuel L. Kountz, described by Doctor Watne as an "internationally known transplant surgeon," at the Brooklyn Medical Center of the State University of New York.

School Of Medicine Faculty Appointments Announced

Three new faculty members have been appointed to the Department of Obstetrics and Gynecology. John W. Durkin, Jr., Associate Professor, will be Chief of the Department of Obstetrics and Gynecology at the Wheeling Division of the WVU Medical Center and will direct the residency program in that specialty at the Ohio Valley Medical Center. He is a graduate of the University of Vermont and its College of Medicine.

John F. Foss, Assistant Professor, will serve as Consultant in Obstetrics and Gynecology to the WVU Health Service in addition to his teaching, clinical and research activities. He comes to WVU from Burlington, Iowa, where he has been in private practice since 1964.

Donald W. Cox will join the faculty on November 1 as an Associate Professor. Doctor Cox has had extensive service with the Army Medical Corps and most recently was Chief of the Department of Obstetrics and Gynecology at Madigan Army Medical Center in Tacoma, Washington.

David F. Colvin has been named an Assistant Professor in the Department of Behavioral Medicine and Psychiatry. He received his M. D. degree from WVU.

Marjorie E. Tripp, a pediatric cardiologist, has been named an Assistant Professor in the Department of Pediatrics. Doctor Tripp, who was born in Minneapolis, is a graduate of the Yale University School of Medicine and received training in pediatric cardiology and fetal physiology under a fellowship at the Cardiovascular Research Institute of the University of California at San Francisco.

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Third-Party News, Views and Program Concerns

FDA Orders Estrogen Brochures Given Female Patients

The Food and Drug Administration recently took two actions to better inform women about the use of prescription drugs containing the female hormones estrogen and progestin.

In the first action, FDA ordered that, starting September 21, a special lay-language brochure on estrogens must be given to women by the dispensing physician or pharmacist each time they have a prescription filled. The brochure points out that estrogens are associated with cancer of the uterus when used for extended periods.

About three million women in the United States use estrogen-containing prescription drugs each year to treat menopausal symptoms and after menopause. The most commonly prescribed drug for this purpose is Premarin.

The brochure also advises women to take estrogen drugs for the shortest time possible and in the lowest effective dose for treatment of menopausal symptoms. The risk of cancer increases the longer the drug is used and the higher the dose. Women also are advised in the brochure to evaluate, with their doctors, the need for estrogen every six months, and to be examined at least once a year while taking the drug.

The estrogen brochure will state that these drugs should not be used to treat simple nervousness and depression during menopause because they have not been shown to be effective for these purposes, and also that they have not been shown to be effective for keeping the skin soft or for helping women feel younger.

When taken during pregnancy, estrogens are associated with an increased risk of birth defects and, in female offspring, of vaginal or cervical cancer. This information is also in the brochure and patients are warned not to take estrogens during pregnancy.

The Progestins

In the second action, FDA is proposing that a similar brochure be given to women for another class of hormone-related drugs, the progestins. These drugs have several purposes, including use in pregnancy tests and to prevent miscarriages, even though there is no adequate evidence they are effective for this latter purpose. The proposed brochure points out that progestins, when taken in early pregnancy, can increase the risk of birth defects in the offspring, such as heart defects or deformed legs and arms, and that there are safer and more rapid pregnancy tests.

Progestins' approved medical uses are primarily for women who have various menstrual disturbances. The most common brand names of prescription drugs containing progestins are Delalutin, Duphaston, Norlutate, Norlutin and Provera.

FDA is encouraging progestin manufacturers to publish and distribute the brochure even while final administrative processes to implement the regulations are completed.

Breast Cancer Referrals Requested By NCI

The cooperation of physicians is requested in the referral of patients with breast cancer for studies being conducted by the Medicine Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

All patients with disseminated breast cancer will be considered for entrance to the program if they are:

(1) less than 65 years of age and have received no prior hormone therapy; (2) have received no prior chemotherapy; (3) have no complicating medical disease, and (4) have evaluable disease.

Physicians interested in further details and in having their patients considered for admission may write or telephone:

Attending Physician, Medicine Branch, National Cancer Institute, Clinical Center, Room 12N-226, National Institutes of Health, Bethesda, Maryland 20014 (Telephone 301/496-4916).

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Obituaries

GOFF P. LILLY, M. D.

Dr. Goff P. Lilly of Pelham, New York, formerly of Charleston, died on August 15 in a nursing home in New Rochelle, New York. He was 75.

A native of Beckley, Doctor Lilly served as Kanawha County Coroner from 1950 to 1967.

He attended Augusta Military Academy and West Virginia University, receiving his M. D. degree in 1927 from the University of Maryland School of Medicine. He practiced in Brooklyn, New York, and New York City before coming to Charleston.

A veteran of World War II, he was a member of the Kanawha Medical Society, the West Virginia State Medical Association and the American Medical Association.

Surviving are a daughter, Mrs. Lawrence W. Keepnews of Pelham, and a sister, Mrs. John A. Wade of Charleston.

* * *

THEODORE R. McCLURE, M. D.

Dr. Theodore R. McClure of Marlinton died on August 12 in a Morgantown hospital. He was 64.

A native of Richwood, Doctor McClure practiced general medicine and surgery at Widen and Marlinton for more than 30 years. He was a former member of the West Virginia State Medical Association.

Survivors include the widow, Mrs. Lillian McWhorter McClure of Elkins; a son, Theodore R. McClure, Jr., Columbia, South Carolina; and two daughters, Mrs. Alice Rogers of Elkins and Mrs. Heather Pugh of Rockville, Maryland.

State Doctors Instructors At National Meeting

Two state ophthalmologists, Drs. Albert C. Esposito of Huntington and J. Elliott Blaydes, Jr., of Bluefield, had assignments as instructors for postgraduate courses during the annual convention of the American Academy of Ophthalmology and Otolaryngology in Dallas, September 30-October 7.

Doctor Esposito received an Honor Merit Award from the Academy during ceremonies on October 3.

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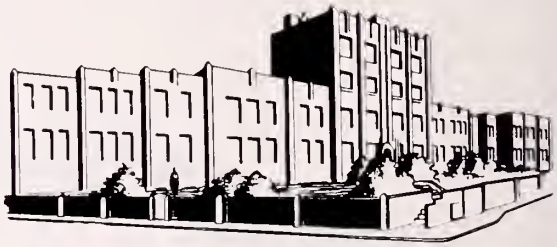

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Resolutions

Editor's Note: Here is a complete text of resolutions *adopted*, in the form in which they were approved finally, at the second and final session of the House of Delegates during the 110th Annual Meeting of the West Virginia State Medical Association August 24-27 at the Greenbrier in White Sulphur Springs:

Resolution No. 1—Reach-To-Recovery Program—By the Committee on Cancer.

WHEREAS, It is estimated there will be 90,000 new breast cancer cases diagnosed in 1977, of which 650 will occur in West Virginia; and

WHEREAS, It is estimated 628 West Virginians will experience various mastectomy surgical procedures; and

WHEREAS, It is the goal of the American Cancer Society's "Reach-to-Recovery" Program to assist women who have undergone breast surgery to achieve their maximum potential—emotionally, physically and psychologically;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association endorse the "Reach-to-Recovery" Mastectomy Rehabilitation Program of the American Cancer Society, West Virginia Division, Inc., and recommend its usage throughout the State; and

BE IT FURTHER RESOLVED, That a copy of this Resolution be provided each member of the West Virginia State Medical Association.

Resolution No. 2—Cigarette Smoking—By the Committee on Cancer.

WHEREAS, It is now reasonably established that there exists a correlation between the use of tobacco and the incidence of cancer of the lung, cardiovascular diseases and respiratory diseases; and

WHEREAS, Many efforts now being made can be enhanced by renewed activity and new approaches to possible solutions to these recognized problems; and

WHEREAS, The Constitution of the West Virginia State Medical Association lists among the Association's purposes the promotion of public health;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association go on record as advocating the voluntary giving up of cigarette smoking by those already habituated; and

BE IT FURTHER RESOLVED, That the West Virginia State Medical Association cooperate with cancer, lung and other appropriate health agencies in educational programs to influence young people not to start the habit of smoking cigarettes; and

BE IT FURTHER RESOLVED, That the West Virginia State Medical Association recommend to individual physicians that they offer advice regarding the dangers of heavy cigarette smoking in their counseling and community educational endeavors, particularly among the teenage population.

Resolution No. 4—Medical Scholarships—By the Committee on Medical Scholarships.

WHEREAS, The vital contribution made by its Medical Scholarship Program is self evident within the overall goals and purposes of the West Virginia State Medical Association; and

WHEREAS, Increased numbers of recipients of Association scholarships have remained in West Virginia for post-graduate training and to enter the practice of medicine; and

WHEREAS, Broadened opportunities for undergraduate training leading to an M.D. degree have been provided within West Virginia by action of the State Legislature in recent years; and

WHEREAS, The cost of undergraduate medical education has increased along with that in other facets of modern living;

THEREFORE, BE IT RESOLVED, That the Committee on Scholarships of the West Virginia State Medical Association—in carrying out duties assigned to it by the Association By-Laws—make Association scholarships available to students enrolling in any educational institution in West Virginia granting an M.D. degree; and

BE IT FURTHER RESOLVED, That the value of the four four-year scholarships to be awarded annually to students entering the first year of medical school be increased from $1,000 to $1,250 per year beginning with the 1978-79 academic year; and

BE IT FURTHER RESOLVED, That the value of scholarships already in effect be increased by a like amount effective with the 1978-79 year.

A Substitute Resolution for Resolution No. 5—Physical Rehabilitation—By the Medical Economics Subcommittee on Vocational Rehabilitation.

WHEREAS, The handicapped people of West Virginia have no private physical facilities for rehabilitation; and

WHEREAS, Current but incomplete information indicates that more than 6,000 West Virginians suffering from such misfortune as spinal cord injuries, strokes, multiple sclerosis, head injuries, other types of orthopedic conditions, heart ailments and chronic respiratory diseases could benefit substantially from physical rehabilitation; and

WHEREAS, Further research could be expected to identify still other individuals who could benefit from the same type of attention provided adequate facilities for diagnosis and treatment were available; and

WHEREAS, The vocational rehabilitation unit operated at Institute by the West Virginia Division of Vocational Rehabilitation, because of statutory, budget and other program limitations, offers services restricted to those with employment potential and cannot possibly meet the real overall needs of residents of the State of West Virginia; and

WHEREAS, Disabled citizens of West Virginia not qualifying for vocational rehabilitation generally must seek care outside the State if their personal resources permit, or receive no rehabilitation if they cannot afford it; and

WHEREAS, There are other instances in which acute care hospitals are utilized for initial rehabilitation efforts at substantial expense and without financial reimbursement; or in which many who could benefit from physical rehabilitation are shunted into general nursing home methods of care with resultant costs to themselves and the public far in excess of those which would be incurred if such individuals could be made partially self-supporting;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association undertake with the help of allied groups to document the need for a Physical Rehabilitation Center for the State of West Virginia; and

BE IT FURTHER RESOLVED, That once such documentation is developed, it be presented to appropriate agencies and committees in the Executive and Legislative Branches of State Government as a basis for planning and development toward establishment of such a Physical Rehabilitation Center; and

BE IT FURTHER RESOLVED, That copies of this resolution be forwarded to the Governor of West Virginia; the President of the West Virginia State Senate, and the Speaker of the West Virginia House of Delegates.

Resolution No. 6—Auxiliary History—By the Publication Committee.

WHEREAS, The Auxiliary to the West Virginia State Medical Association is and has been a most valued asset to the Association in all of its endeavors; and

WHEREAS, A history and accounting of that Auxiliary's countless activities and acts of assistance and generosity to the Association and to the people of West Virginia is an invaluable source of reference to the traditions of service to the State of West Virginia by the medical community; and

WHEREAS, The compilation of such a history is an arduous task requiring untold hours of diligent research and painstaking attention to detail; and

WHEREAS, Such a history has been completed and published in highly literate form and editorial style; and

WHEREAS, The members of the West Virginia State Medical Association have thereby been presented with one additional opportunity to express a debt of appreciation to their spouses in the Auxiliary;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association does gratefully acknowledge and express its appreciation to the Auxiliary to the West Virginia State Medical Association for all of its past endeavors by recognizing and honoring ASTRI ERICA JARRETT as Editor of HALF A CENTURY 1925-1975, THE FIFTY YEAR HISTORY OF THE WOMAN'S AUXILIARY TO THE WEST VIRGINIA STATE MEDICAL ASSOCIATION.

Resolution No. 7—Student Membership—By David Z. Morgan, M. D.

WHEREAS, There is growing public concern over the retention rate of West Virginia-trained physicians within the State; and

WHEREAS, Medical student involvement in organized medicine within West Virginia may instill in students a lasting desire to practice medicine within the State; and

WHEREAS, Medical students in West Virginia have proven themselves to be vitally interested in matters of legislation that affect health-care delivery in the State;

THEREFORE, BE IT RESOLVED, That the Committee on Constitution and By-Laws study and prepare amendments to the Constitution and By-Laws of the West Virginia State Medical Association that provide for medical student *membership* and *participation* in the Association at a nominal membership fee. These amendments shall be reported to the Council and to the House of Delegates at the next Annual Meeting; and

BE IT FURTHER RESOLVED, That the Committee on Constitution and By-Laws also study the establishment of a Medical Student Section, with a Delegate in the House and student members appointed to appropriate standing committees of the Association, such Section being modeled after the Student Business Section of the AMA. The recommendations of the Committee shall be reported to the Council and to the House of Delegates at the next Annual Meeting.

A Substitute Resolution for Resolution No. 9—Review of Professional Charges—By the Kanawha Medical Society.

WHEREAS, Third-party pay agencies have attempted to disrupt the rapport between patients and physicians by intimidating and/or contesting that professional charges for services rendered are in some instances excessive;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association hereby remind all third-party groups (insurors) that contractual problems regarding payment of physician fees are a matter to be settled between the insuror and the insured party; and

BE IT FURTHER RESOLVED, That the West Virginia State Medical Association will not maintain any committee to review, at the request of a third party, any fee submitted by any physician, or indeed to recommend increase or decrease of any fee in question; and

BE IT FURTHER RESOLVED, That the West Virginia State Medical Association, through a directive to the offices of the several local societies, urge that each and every society refuse to adjudicate the differences between the fee submitted by a physician and the amount the insuror agrees to pay the patient for services rendered; and

BE IT FURTHER RESOLVED, That component societies of the West Virginia State Medical Association be further encouraged to continue *to adjudicate grievances between patients and physicians.*

A Substitute Resolution for Resolution No. 10—Certificate of Need—By the Kanawha Medical Society.

WHEREAS, It appears that West Virginia Hospital Association policy advocates that a certificate of need statute cover physicians in private practice providing services to other physicians, and large capital expenditures of such physicians; and

WHEREAS, It is the clear policy of the American Medical Association and the West Virginia State Medical Association that the private practice of medicine should be exempt from any certificate of need requirements; and

WHEREAS, Certificate of need legislation, and administrative rules and regulations promulgated to implement the law, might be fashioned to limit the practice of some medical specialties to hospital settings; and

WHEREAS, There appears to be good reason for concern that certificate of need legislation has the potential for eventually placing all medical practice under the control of hospitals; and

WHEREAS, Limitations on the freedom to practice medicine or control of physicians by hospitals are not in the best interest of the citizens of West Virginia;

THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association continue, and intensify, its communication and working relationship with the West Virginia Hospital Association toward resolving policy differences and questions in a manner that will insure coordinated and effective efforts toward provision of quality health care.

Resolution No. 3 by the Monongalia County Medical Society, censuring State Medical Licensing Board regulations requiring physicians to submit cashier's checks or postal money orders to pay relicensure fees, was not adopted in view of Board action rescinding those requirements, but the House heard an explanation by Dr. Frank J. Holroyd of Princeton, Licensing Board Chairman, of how the rule developed and how it was withdrawn.

Resolution No. 8 by the Greenbrier Valley Medical Society calling for a single licensing board, and licensing examination, for all physicians—doctors of medicine and doctors of osteopathy—was referred to an Association committee to be established to study this and related matters.

Necrology Report

The following is a list of West Virginia physicians whose deaths have been reported to the West Virginia State Medical Association during the past year.

1976

July 21—Robert C. Hatfield — Smith Mountain, Va.
Aug. 17—Leo E. Christian — Huntington
Aug. 25—George F. Evans — Clarksburg
Sept. 13—Karl J. Myers — Philippi
Sept. 25—Margaret B. Ballard — Union
Oct. 13—John W. Rackey — Beckley
Oct. 16—Howard A. Swart — Charleston
Nov. 1—James R. Glasscock — Richwood
Nov. 6—A. M. Price — Madison
Nov. 8—Raymond H. Curry — Barboursville
Nov. 18—Wilhelm Konrad Kalbfleisch — Wheeling
Nov. 20—A. T. Gordon — Spencer
Nov. 21—Donald M. Burke — Elkins
Nov. 25—James E. McClung — Richwood
Nov. 25—R. N. Pelaez — Forest Hills, N. Y.
Dec. 6—Michael G. Hresan — Fayetteville
Dec. 9—William A. Wallace — Martinsburg
Dec. 15—John E. McKenzie — Beckley
Dec. 19—Francis C. Prunty — Parkersburg
Dec. 20—George B. Edmiston — Webster Springs
Dec. 28—W. Merle Warman — Morgantown

1977

Jan. 31—O. S. Reynolds — Franklin
Feb. 1—Richard L. Stovall — Walnut, Miss.
Mar. 30—Edward S. Hamilton — Oak Hill
Apr. 3—Milford F. Townsend — Petersburg
Apr. 14—William A. Klausman — Rupert
Apr. 24—Halvard Wanger — Shepherdstown
May 6—William E. Myles — White Sulphur Spgs.
May 8—A. D. Ferrell — Lewisburg
May 9—Francis J. Gaydosh — Wheeling
May 21—Raphael J. Condry — Elkins
May 28—James W. Stokes — Hinton
May 29—Norvell L. Haislip — Wheeling
June 5—David Bressler — Fairmont
June 17—Russel Kessel — Charleston
June 26—Donald S. Groves — Summersville
July 5—W. Burl Wright — Burnt House
July 30—O. D. MacCallum — Madison
Aug. 12—Theodore Russell McClure — Marlinton
Aug. 15—Goff P. Lilly — Pelham, N. Y.

Respectfully submitted,

Charles R. Lewis,
Executive Secretary

Aug. 24, 1977

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Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. The 1978 Roster of Members will be prepared and placed in the mails shortly after the first of the year and we would very much like for your correct address to appear in same. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

STATEMENT REQUIRED BY THE ACT OF OCTOBER 23, 1962; SECTION 4369, TITLE 39, UNITED STATES CODE SHOWING THE OWNERSHIP, MANAGEMENT AND CIRCULATION OF THE WEST VIRGINIA MEDICAL JOURNAL.

The West Virginia Medical Journal is published monthly at 1526 Charleston National Plaza, Charleston, West Virginia 25301.

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I certify that the statements made by me above are correct and complete.

(Signed) Charles R. Lewis,
Managing Editor

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1900-1976

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Member 1977

CONTENTS

Scientific Articles

Pseudoventricular Aneurysms—Reverdy H. Jones, Jr., M. D. 287

Primary Adenocarcinoma of the Vermiform Appendix: Report of Five New Cases and Review of the Literature—A. F. Aburahma, M. D. 296

Special Article

A Colleague's Views on Medicine and Health—Charles E. Andrews, M. D. 302

The President's Page

Some Healthy Introspection—Joseph A. Smith, M. D., President, W. Va. State Medical Association 304

Editorials

PSRO Review 305

Accepting the Challenge on Health-Care Costs 306

The Kind of System We Do Not Need 306

General News

Eleventh Mid-Winter Clinical Conference 308

Continuing Education Activities 311

AMA House To Meet December 4-7 311

Association Accredits CME Program 311

Mid-Winter Conference Site Changed 311

Committee Appointments 312

Southern Medical Association Meeting 313

Review A Book 313

Special Departments

WVU Medical Center News viii

Third-Party News, Views, Program Concerns x

Obituaries xii

County Societies xii

Book Review xiv

Classified Section xxv

Index To Advertisers xxvi

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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Visiting Professor Program For Biochemistry

For its Visiting Professor Program for 1977-1978, West Virginia University School of Medicine's Department of Biochemistry will be host to four distinguished scientists. Each visitor will be on campus for one week to present a series of four lectures and to meet with faculty and students.

The program was designed and the speakers selected to be of interest to WVU scientists in the general area of biological sciences. The speakers, their affiliations, areas of research and dates of visits to the University are:

Dean Lockwood, M. D., Chief, Endocrinology-Metabolism Unit, Department of Medicine, University of Rochester (New York), the interaction of insulin with membrane receptors, week of November 14.

Saul Kit, Ph. D., Head of the Division of Biochemical Virology, Baylor College of Medicine, Houston, Texas, biochemical aspects of viral action, week of December 5.

E. H. Cordes, Ph. D., Chairman, Department of Chemistry, Indiana University, Bloomington, mechanisms of enzyme action, week of March 6, 1978.

Edwin G. Krebs, M. D., Chairman, Department of Pharmacology, University of Washington School of Medicine, Seattle, protein kinases and the regulation of cellular metabolism, week of April 17, 1978.

Recent Faculty Appointments In Three Departments

Here are new faculty appointments which recently have been made at the WVU School of Medicine:

Willard S. Harris, M. D., Professor of Medicine and Chairman, Division of Cardiology; Roy W. Ortel, M. D., Professor of Medicine, Wheeling Division, WVU School of Medicine; Jovan Milutinovich, M. D., Associate Professor and Chairman, Division of Nephrology; Shawn Chillag, M. D., Assistant Professor, Division of General Internal Medicine; Stuart M. Deglin, M. D., Assistant Professor, Division of Cardiology, and Michael E. Crouch, M. D., Assistant Professor, Division of Rheumatology (all of above in Department of Medicine).

Roland L. Kennedy, M. D., Professor; John Bellotte, M. D., Assistant Professor (also holds joint appointment as Assistant Professor in the Department of Medicine); William R. Henrick, M. D., Assistant Professor, and Arunthathie Rajaratnam, M. D., Assistant Professor, all Anesthesiology.

John C. Frich, Jr., M. D., Professor and Chairman, Division of Radiation Oncology; Otto J. Kunst, M. D., Assistant Professor of Diagnostic Radiology; Morteza K. Elyaderani, M. D., Assistant Professor, and Brian Cosman, M. D., Assistant Professor, all Radiology.

WVU Chosen As Contractor In Library Network

WVU has been chosen by the National Library of Medicine as the first contractor in what is expected to become a National Biomedical Communications Network.

Ultimately in such a network, every community hospital in the nation could provide easy access to biomedical information. The plan is a direct response to the rising costs and quantities of medical information.

An individual hospital library can hope to supply only a fraction of the resources its users might need and must depend on other libraries to supplement those needs.

The network design consists of four levels: the Basic Unit, which is either one or a consortium of community hospitals; the Area Library or Medical Center Library; the Regional Medical Library, 11 of which already have been designated in the United States, and the National Library of Medicine.

When it becomes operational, every community hospital can obtain needed information with a minimum of delay.

Robert L. Murphy, Chief Librarian at WVU Medical Center, is in charge of development of two Basic Units in West Virginia, as the first step in this national network.

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Third-Party News, Views and Program Concerns

Nationwide Medicare Claims Due Prior To January

Nationwide-Medicare has explained that, despite consistent reminders each year, many Medicare beneficiaries fail to file some claims before the payment deadline. During each of the past two years, over 19,000 claims have been rejected because of this oversight, the company said.

"For better patient relationships, and to improve cash flow, physicians are urged to assist these patients in filing Medicare claims, or remind them to do so in order to receive all available benefits," Nationwide—the Part B Medicare carrier in West Virginia—added. The company further noted:

"There is a filing deadline for claims for medical services provided from October 1, 1975, to September 30, 1976. They can be paid only if mailed and delivered to Nationwide prior to year-end 1977.

"Also, some patients lose their carryover credit by holding claims until the $60 deductible credit has been accumulated. Each year, when accumulated medical bills do not total $60, they should be sent in—because, in such cases, bills from fourth-quarter services will apply toward the next year's deductible.

"Additionally, claims forwarded before the holiday mail rush will traditionally receive more prompt service than those claims arriving with the December-February avalanche."

Referrals Requested In Premature Coronary Artery Disease

The cooperation of physicians is requested in the referral of patients with premature coronary artery disease for studies being conducted by the Cardiology Branch of the National Heart, Lung, and Blood Institute at the Clinical Center, Nation Institutes of Health, Bethesda, Maryland.

Patients under 65 with angina pectoris or a history of myocardial infarction are sought for a prospective natural history study to determine whether high-risk and low-risk subgroups can be identified. Of particular interest are patients under 45 who have no known risk factors. Study techniques will include exercise testing with radionuclide cineangiography, 24-hour ECG tapes, clinical evaluation, and coronary arteriography. Additional screening studies will also be carried out for multiple genetic and metabolic risk factors predisposing to the early development of atherosclerosis. A complete summary of the work-up findings and recommendations will be sent to the referring physician.

Physicians interested in further details or in having their patients considered for admission may write or telephone:

Robert M. Stark, M. D., or Kenneth M. Kent, M. D., Ph. D., Cardiology Branch, National Heart, Lung, and Blood Institute, Building 10–Room 7B-15, Bethesda, Maryland 20014, (301) 496-5817.

Fire Fatalities, Losses For U. S., State

Statistics from the National Fire Protection Association show that 18 people each day die in residential fires, according to a recent issue of State of the State's Health, by Dr. George E. Pickett, State Health Director.

Children account for 30 per cent of all fire victims and an estimated 25 per cent of the tragedies take place when children are alone or without proper supervision.

According to the State Fire Marshal in West Virginia, 67 individuals in the state lost their lives due to fire related incidents in fiscal year 1976-77, while property losses because of fire amounted to more than $24 million during that period.

The daily property loss as a result of fire in the United States averages: 1,812 homes, 415 apartment buildings, 97 school and college buildings, 15 churches, 86 hospitals, nursing homes and other institutions, 238 stores and offices, 73 restaurants and taverns, 145 industrial plants, 188 storage facilities, and 84 farm buildings.

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Obituaries

ROBERT J. TCHOU, M. D.

Dr. Robert J. Tchou, Williamson surgeon and co-owner of Williamson Memorial Hospital, was killed in an airplane crash near there on September 22. He was 56.

Doctor Tchou was trying to take off from the Mingo County Airport when his single-engine Piper Cherokee apparently stalled and crashed into a hill near Chattaroy.

Doctor Tchou, who had resided in Williamson since 1953, became a partner of the Williamson hospital with Dr. Russell A. Salton in 1964.

A native of Shanghai, China, Doctor Tchou completed his undergraduate and medical education in that country, receiving his M. D. degree in 1946. He came to this country in 1948.

He served his internship, residency, and completed postgraduate work, at West Virginia University Hospital, Fourth Municipal Hospital of Shanghai, St. Francis and Kanawha Valley hospitals in Charleston, and George Washington University.

Survivors include the widow; three children at home, Patrick Tchou, Robert J. Tchou, Jr., and Heather Alicia Tchou; two other sons, Michael Tchou of Blacksburg, Virginia, and Sonny Tchou, a doctor in Peking, China; another daughter, Honey Tchou, also a doctor in Peking; the father, Dr. T. T. Tchou of Shanghai, and a brother, Richard Tchou of Shanghai.

County Societies

CABELL

The Cabell County Medical Society met on September 8 at the Gateway Inn in Barboursville.

Dr. Charles E. Turner of Huntington, who was in England this summer, gave a very interesting and erudite discussion on the practice of medicine there.

Dr. Jack Leckie presented a very concise report on the Annual Meeting of the State Medical Association in August at the Greenbrier.—William J. Echols, M. D., Acting Secretary Pro Tem.

CENTRAL WEST VIRGINIA

The Central West Virginia Medical Society met on July 21 at the Country Roads Inn at Zella, near Summersville.

Dr. John D. Jacobson of Summersville showed slides of Nepal that he had taken several years ago when he was there as a missionary.

A motion was passed to increase our contribution to the AMA-ERF from $10 to $25 in honor of deceased members of our Society.

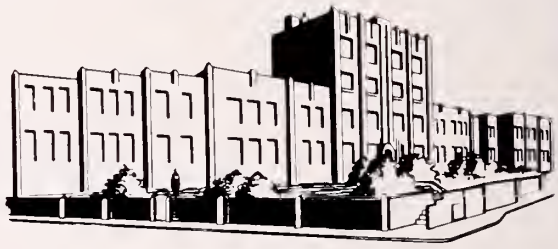
The Society also voted to increase our present contribution of $80 to $115 for a camper scholarship, which is now $115, for Camp Kno-Koma.—Joseph B. Reed, M. D., Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on September 6 at the Lakeview Country Club near Morgantown.

Doctor and Mrs. Joseph A. Smith of Dunbar were guests of the Society. Doctor Smith, President of the West Virginia State Medical Association, gave a very nice presentation on the activities of the State Medical Association.—Barbara Jones, M. D., Secretary.



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Book Review

THE MEDICAL SCHOOL ADMISSION ADVISER—Marvin Fogel, M. D., and Mort Walker, M. D. Hawthorn Books, Inc., New York. 264 Pages. 1976. Price $5.45.

Every fond father who has aspirations of son or daughter following in his Galenic footsteps would be wise to purchase and peruse this handbook, written by an adviser at a large New York university. It is a hard-headed, realistic approach to the medical school admissions dilemma today. In a word, it's difficult. Forewarned is forearmed.

I glean that early in college the student should have some idea of the schools where one might apply so that various admission requirements may be satisfied. The authors also place emphasis on appropriate summer activities and employment. However, I take personal exception to their thesis that the renaissance student with a major in some non-scientific field, yet with proper prerequisites, is not as desirable as a chemistry or biology major, but they probably speak with sincerity.

The authors give an appropriate discussion of the MED-CAT test, emphasizing that the format of this critical examination has recently changed, again favoring the scientific mind. Also, there is a good chapter on "Truth in Interviewing" techniques.

This book is worthwhile for anyone who has aspirations of adding a physician to the family, although this realistic appraisal of the candidate's chances is somewhat startling.—Thomas F. Scott, M. D.

CURRENT OBSTETRIC & GYNECOLOGIC DIAGNOSIS AND TREATMENT—Ralph C. Benson, M. D., and associate authors. Lange Medical Publications, Los Altos, California 94022. 912 Pages. 1976. Price $16.

Editor's Note: The following book review was submitted by Professor dr. Victoria Zinca of Romania, Member of the International Academy of Cytology. Doctor Zinca's request for the above book to review was noted in an article in the September issue of *The Journal*. As mentioned in that article, many medical books were lost in an earthquake last March in Romania. West Virginia physicians who wish to help replace medical texts may send them to Doctor Zinca at this address: P. Box 637, P. Office 1, R-70100 Bucharest, Romania.

This is a most up-to-date, comprehensive book, primarily designed for medical students to approach the study of obstetrics and gynecology.

The essential feature of the book is the assessing of the value of bodies of medical information, the reaffirmation of the validity of the concepts that have survived after spectacular medical progress, and their integration into the framework of medical practice.

The text is clearly written, readable and very well organized, including 43 chapters and an appendix. Every chapter is concise, but contains more than the core material that students need to know; the busy resident or practicing physician will find up-to-date information, consultations and patient-care activities.

Controversy has been avoided, and successes tested by the authors' experience have been the basis for choices between alternatives. Preventive aspects and the principles of gynecologic surgical technics also have been discussed.

The excellent case descriptions, chronologically presented, serve as a student-orienter and a working instrument designed to make obstetrics and gynecology rational, interesting and of direct application to the problems of medicine.

The chapters are accompanied by splendid illustrations which are simple, accurate and convey a definite idea. In addition, the chapters are completed with current references including many review articles necessary for specific problems.

The book is a valuable source of informa- for medical students, residents, family practitioners and specialists in obstetrics and gynecology and is highly recommended.—Professor dr. Victoria Zinca, M.I.A.C.

AMA Congress On Medical Education In February

"Changing Relationships in Medical Education" will be the theme of the 74th Congress on Medical Education, February 3-5, in Chicago at the Palmer House.

The Congress will be presented by the Council on Medical Education of the American Medical Association, in collaboration with the Association for Hospital Medical Education, the Federation of State Medical Boards of the United States, and the resident physician section and student business session of the AMA.

Congress participants will study relationships between medical education and government, impact of health planning on medical education, changing relationships of the medical school, hospital, medical society, and other areas of concern.

DECEMBER
1977

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CONTENTS

Special Article

Physician, Look In Your Mirror!—John H. Budd, M. D. 315

Scientific Articles

Renal Calcium and Its Implications—Alfred K. Pfister, M. D. 319

Platelet Satellitosis and Other In Vitro Changes Induced by EDTA—Terrence Steiner, M. D. 322

Scientific Department

Medical Grand Rounds from the West Virginia University Hospital (Thyroid Carcinoma)—Edited by Irma H. Ullrich, M. D. 326

The President's Page

The Face in the Mirror—Joseph A. Smith, M. D., President, W. Va. State Medical Association 330

Editorials

A 'New Look' Journal 331
Pronunciation of Medical Words 331
Lest We Forget 332
More On PSRO 333

General News

Eleventh Mid-Winter Clinical Conference 334
Continuing Education Activities 336
Family Practice Review Course 337
AMA Winter Scientific Meeting 338
Cooperation Asked by Social Security 338
First Capitation Grant for Marshall 338
EENT Academy Re-Accredited for CME 339

Special Departments

WVU Medical Center News x
Third-Party News, Views, Program Concerns xii
Obituaries xiv
County Societies xiv
Review A Book xvi
Annual Report xvii
1977 Annual Index xxiv
Classified Section xxvii
Index To Advertisers xxviii

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WVU Medical Center
—News—

Compiled from material furnished by Mrs. Mary Ellin Wylie, Director, Medical Center News and Information Services, Morgantown, W. Va.

Doctor Waldman Honored In West Germany

A West Virginia University School of Medicine physician was honored on November 10 for his work in immunology by a West German scientific organization, the Immunologic Society of Munster.

Robert H. Waldman, Professor and Chairman of the Department of Medicine, received the Alexandre-Besredka prize during Immunology Days in Munster. Included is a grant of 5,000 marks, or more than $2,000. The award ceremony, which was attended by nearly 100 scientists and physicians, was held in the historic town hall of Werne.

Doctor Waldman spoke at this year's meeting of the society. He discussed "Local Immunization" on November 12 and participated in a roundtable discussion.

Formerly Associate Chairman of the Department of Medicine and Head of the Division of Infectious and Immunologic Diseases at the University of Florida College of Medicine, Doctor Waldman joined the WVU faculty in 1976. A native of Dallas, he is a graduate of Washington University School of Medicine in St. Louis.

His research reports in infectious diseases and immunology have been published in leading medical journals, and he is the author or co-author of 25 chapters in medical textbooks.

Three Urology Residents Receive Awards

Three WVU representatives received awards in the Residents' Essay Contest for clinical and research papers during the 35th annual meeting of the Mid-Atlantic Section of the American Urological Association in October at The Homestead in Hot Springs, Virginia.

The winners, whose presentations were in competition with those from 13 other medical centers, are Drs. Gregory Post, Robert P. Cricco and John A. Belis, all residents in the Department of Surgery's Division of Urology at WVU Medical Center.

D. F. Milam, M. D., Chairman and Professor of Urology at WVU School of Medicine, was program chairman for the meeting. He is a Past President of the organization's Mid-Atlantic Section.

Doctor Post, a second-year resident, won first prize for clinical papers with his "Anatrophic Nephrolithotomy in the Management of Staghorn Calculi."

Doctor Cricco, also a second-year resident, won second place in research papers with "Comparative Actions of Castration and Cyproterone Acetate on Sex Accessory Epithelium and Muscle Function," and Doctor Belis, a chief resident, won third prize for research papers with "Urinary Non-Esterified Cholesterol in Adenocarcinoma of the Prostate—A Preliminary Report."

Other scientific program participants from WVU's Division of Urology, and their topics, were Stanley Kandzari, M. D., Associate Professor, "Treatment of Localized Carcinoma of the Prostate with Retropubic Implantation of Iodine-125 Combined with Bilateral Pelvic Lymphadectomy," and Emerson L. Knight, Jr., M. D., Chief Resident, "Ureteroileostomy — Sixteen Years' Experience."

Senior Wins International Rural Fellowship

James R. Judge, Jr., of Weirton, a senior at WVU School of Medicine, is one of 41 medical students from the United States and Canada recently awarded Medical Assistance Programs (MAP)-Reader's Digest International Fellowships for three-month terms to rural mission hospitals and clinics in remote parts of the world.

The programs, made possible by a grant from Reader's Digest founder, DeWitt Wallace, provide students with firsthand knowledge of health problems in segments of the world's population which have the least access to adequate medical care. Planned and supervised, they are offered by local hospital and clinic staffs.

Mr. Judge, who will begin his fellowship in March, expects to go to Central Africa.

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Third-Party News, Views and Program Concerns

Child Immunization Campaign To Begin In State

In an effort to combat declining levels of immunization in the United States, HEW Secretary Joseph Califano has made immunizations his No. 1 priority for the next year. With increased funding from HEW, the West Virginia State Health Department, in cooperation with the West Virginia League for Nursing, will begin a massive campaign this winter to assure that all children are immunized. All physicians in West Virginia will be contacted to request their cooperation in this effort.

The level of immunizations in West Virginia far exceeds that for the nation, with 85-90 per cent of preschoolers and 95-100 per cent of school entrants completely immunized as compared to an overall level of about 65 per cent of United States children. "Although this is good news, we still have a population of unimmunized children large enough to support an epidemic with its attendant morbidity and mortality," health officials have emphasized.

The steering committee for the campaign includes representatives from the State Health Department, West Virginia League for Nursing, American Academy of Pediatrics, State Department of Education and West Virginia Nurses Association. Mrs. Sharon Rockefeller has agreed to be Honorary Chairperson.

Those desiring more information about the campaign should contact Bette Hinton, M. D., Department of Community Medicine, WVU Medical Center, Morgantown 26506.

Success Of Liquid-Protein Diets Never Proved, FDA Says

The U. S. Food and Drug Administration is receiving numerous public inquiries about predigested protein drinks which are being heavily promoted as aids in "modified fasting" diets.

These liquid-protein diets are made from hydrolized (predigested) collagen or gelatin obtained from animal hides, tendons and bones. They are basically protein supplements. Some are fortified with a limited number of other essential amino acids, vitamins and minerals. None is nutritionally complete. Liquid-protein drinks contain about 60 calories per one ounce serving.

During the diet, these liquid protein drinks are intended to be the principal item in the diet, since any carbohydrate eaten in other foods defeats the theory of the "modified fasting" regimen. The theory is that the consumption of this protein alone will maximize the burning of body fat while conserving the muscle tissues, which are predominately protein. The success of long-term weight loss under this regimen has never been proved.

Liquid-protein diets are neither registered nor approved by FDA. The FDA is responsible for the labeling of such products, but generally the labeling does not give directions for weight loss regimens. Such claims are made in books, by word of mouth or in the media, which are beyond FDA's control.

The following background may be useful in answering general questions about liquid protein diets:

—High-protein diets are no more effective than other dieting regimens in promoting weight loss. Fat accumulation is due to the consumption of food in excess of body needs, and it makes no difference whether the calories come from fats, carbohydrates or protein.

—The body uses its own protein, as well as fat, for energy when one in on a weight-control diet. The use of body protein for energy results in loss of water, minerals and other materials, in addition to the protein. These, collectively, are called the "lean body mass," primarily muscle tissue. There is no evidence that high-protein diets will prevent loss of "lean" body mass, but rapid weight loss almost always indicates loss of body "lean" and will be regained rapidly after ending the diet.

—Persons on high-protein diets should never restrict their intake of water because dehydration will occur.

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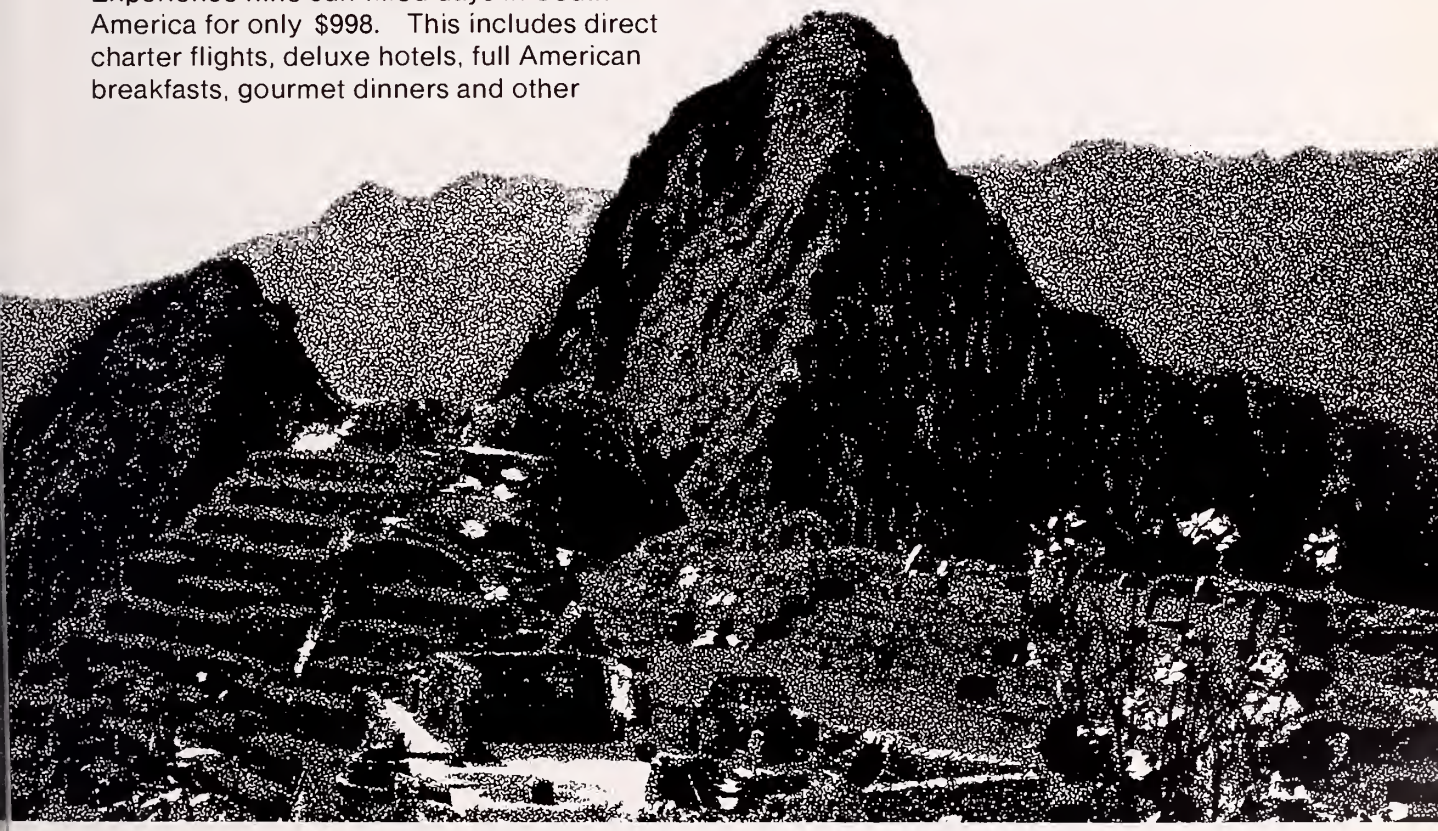

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Obituaries

JOHN H. MURRY, M. D.

Dr. John H. Murry of Gary, former McDowell County Health Director, died on October 9 in a Welch hospital after an extended illness. He was 68.

A native of Pequea, Pennsylvania, Doctor Murry also had served as McDowell County Coroner and Medical Examiner, and previously had been Medical Director for the U. S. Steel Corporation in Gary.

He was graduated from Franklin and Marshall College in Lancaster, Pennsylvania, and received his M. D. degree in 1936 from the Medical College of Virginia. He served his internship at St. Elizabeth's Hospital in Richmond, Virginia, and began practice in McDowell County in 1937.

Doctor Murry was a member of the McDowell County Medical Society, the West Virginia State Medical Association, the American Medical Association, the National Health Officers Association, and the West Virginia Heart Association.

Survivors include the widow; two daughters, Garyn Ann Murry and Deidre Murry, both at home; a son, John H. Murry II of Laurel, Maryland, and two sisters, Mrs. Verna Krier of Horshampa, Pennsylvania, and Mrs. Claire Schulty of Lancaster, Pennsylvania.

County Societies

CABELL

The Cabell County Medical Society met on October 13 at the Gateway Inn in Barboursville.

Dr. William Shubert of Cincinnati gave a delightful and informative talk on Reye's Syndrome, with a question-and-answer period following.—Colin M. Craythorne, M. D., Acting Secretary.

* * *

MONONGALIA

The Monongalia County Medical Society met on October 4 at the Old Mill Club in Morgantown.

Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia Medical Institute, Inc., and Mrs. Betty Kirkwood of Charleston, Executive Director of the Institute, were guests of the Society.

Doctor Weeks talked on the status of PSRO in our state and its meaning for physicians in our area. There was much interest and discussion, resulting in a better understanding of what is being done in the state.

It was reported that the Executive Council of the Society had voted to contribute $100 to the Pylon, the West Virginia University School of Medicine Yearbook. The Council also approved the forwarding of a check for $4,000, representing the balance in funds from 1976, to the Dean's Scholarship Fund at WVU School of Medicine.

The Society approved a contribution of $100 to support publication of the Council of Social Agencies Directory.—H. Summers Harrison, M. D., Acting Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on September 14 at The Stevens Clinic Hospital Library in Welch; and the Society also met on October 12 at the same location.

The guest speaker for the September meeting was Mr. Mark Kempner, Director of the Health Education Project for McDowell County. Mr. Kempner said the goal of the project is to improve the health status of the population dramatically by educating people to assume more responsibility for their own life and their own health than previously. He talked about indices of health status, quoting at length from a basic study by Dean Breslow of UCLA regarding the epidemiology of health—not of illness.

At the October meeting, the medical program, presented by Dr. Muthusami Kuppusami, was a movie on the early diagnosis of rectal cancer produced by the American College of Surgeous.

The Society observed a moment of silent tribute to the late Dr. John H. Murry of Gary, who died on October 9.—Muthusami Kuppusami, Secretary.

* * *

CENTRAL WEST VIRGINIA

The Central West Virginia Medical Society met on October 4 at the Bicentennial Motel in Buckhannon.

Doctor and Mrs. Joseph A. Smith of Dunbar were guests of the Society. Doctor Smith, President of the West Virginia State Medical Association, spoke on his concerns as President of the Medical Association.

Other guests included Mrs. Robert J. Reed III of Wheeling, President Elect of the Auxiliary to the State Medical Association; Mr. Tom Auman

(Continued on Page xvi)

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Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

General Ophthalmology, 8th Edition, by Daniel Vaughan, M. D., and Taylor Asbury, M. D. 379 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1977.

Handbook of Obstetrics & Gynecology, 6th Edition, by Ralph C. Benson, M. D. 722 pages. Price $9.50. Lange Medical Publications, Los Altos, California 94022. 1977.

The Nervous System, by W. F. Ganong, M. D. 226 pages. Price $8. Lange Medical Publications, Los Altos, California 94022. 1977.

Current Surgical Diagnosis and Treatment, 3rd Edition, by J. Engelbert Dunphy, M. D.; Lawrence W. Way, M. D., and associate authors. 1139 pages. Price $18. Lange Medical Publications, Los Altos, California 94022. 1977.

Review of Medical Physiology, 8th Edition, by William F. Ganong, M. D. 559 pages. Price $12.50. Lange Medical Publications, Los Altos, California 94022. 1977.

Handbook of Pediatrics, 12th Edition, by Henry K. Silver, M. D.; C. Henry Kempe, M. D., and Henry B. Bruyn, M. D. 723 pages. Price $9. Lange Medical Publications, Los Altos, California 94022. 1977.

Medicolegal Aspects of Hospital Records, Second Edition, by Emanuel Hayt, LL. B. 519 pages. Physicians' Record Company, 3000 South Ridgeland Avenue, Berwyn, Illinois 60402. 1977.

Handbook of Poisoning, 9th Edition, by Robert H. Dreisbach, M. D., Ph. D. 559 pages. Price $8. Lange Medical Publications, Los Altos, California 94022. 1977.

COUNTY SOCIETIES—Con't. from Page xiv

of Charleston, Account Supervisor, Aetna Life and Casualty Company, who discussed the State Medical Association's medical malpractice insurance program; and several medical students from the West Virginia University School of Medicine.

The Society approved donations to the West Virginia University Foundation, Inc. to establish a scholarship in honor of Dr. N. H. Dyer, retired State Health Director. The donations will be made in installments of $100 this year, $50 in 1978, and $50 in 1979.

The Society also approved payment of $50 to the American Medical Student Association as a sustaining membership.—Joseph B. Reed, M. D., Secretary.

First Auxiliary President Dies In Huntington

Mrs. A. G. (Minnie) Rutherford of Huntington, the first President of the (Woman's) Auxiliary to the West Virginia State Medical Association, died in a hospital there on August 31, it was learned by *The Journal*. She was 96.

Mrs. Rutherford, then of Welch, organized the first meeting of more than 100 physicians' wives in 1925 during the convention of the State Medical Association in Bluefield at the West Virginian Hotel.

She also organized, and was the first President of, the McDowell County Medical Society's Auxiliary, and was a Past President of the Cabell County Auxiliary.

Mrs. Rutherford had been a resident of Huntington since 1934. Doctor Rutherford died in 1951.

Mrs. Rutherford, who was born at Meadowbrook Farm, in Pike County, Kentucky, was one of the oldest members of Johnson Memorial Methodist Church in Huntington.

Survivors include a sister, Mrs. T. C. Weeks of Bellaire Beach, Florida, and several nieces and nephews.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. The 1978 Roster of Members will be prepared and placed in the mails shortly after the first of the year and we would very much like for your correct address to appear in same. Notices should be mailed to Box 1031, Charleston, West Virginia 25324.

ANNUAL REPORT

Committee On Maternal Welfare

The meeting of the Maternal Welfare Committee of the West Virginia State Medical Association was called to order by the Chairman at the Heart-O-Town Motor Inn, Charleston, West Virginia, on Saturday, August 13, 1977, at 1:30 P.M. In addition to the members, there were two guests, David J. S. Hunter, M.D., Associate Professor of Obstetrics/Gynecology, West Virginia University Medical Center, Morgantown, and Roger Lewis, MSII, WVU Medical Center, Morgantown. The members attending the meeting represented a hard core of interested obstetricians professionally qualified to to review case abstracts; to understand the facts contributing to each maternal death, and to make intelligent recommendations for the benefit of the interested physicians and for the edification of the physicians who practice obstetrics in the state.

The Committee has been extremely grateful to interested physicians who have taken time from their busy practices to complete a detailed questionnaire, and to forward copies of case histories and copies of autopsy reports. Hospital administrators and record librarians also are to be commended for their cooperation in forwarding complete case records on the maternal deaths.

The data obtained from the different sources was abstracted as hypothetical cases with names of the patients, the interested physicians and hospitals confidential and not available to anyone except the Secretary and his departmental secretary. All sources of information were used to determine a sudden demise in a complicated delivery and were obtained from the patient's chart, the doctor's notes, the resident's history and especially the nurses' notes.

The State Department of Health's Bureau of Vital Statistics, under the direction of Dr. H. N. Dyer; Dr. Charles E. Andrews, who briefly succeeded Doctor Dyer as State Health Director, and Mr. Paul Shanks, was the primary source of our maternal death information. The death certificates of all women in the child bearing age were checked by a special clerk in the Bureau and any death certificate having any relationship to pregnancy was photostated and referred to the Secretary for his scrutiny. If the certificate was classified as a maternal death, the proper letters were written and a questionnaire forwarded to the physician. In borderline cases, a letter was written for clarification.

The Secretary reported that there were prenatal and delivery services available for indigent families in 53 counties of the state. There were 1,028 deliveries in 1976 in this program.

Family Planning Clinics were established in all 55 counties of the state, with clinics in 65 sites. Active on the program for 1976 were 23,830 patients for a total of 47,621 visits. There were 8,601 new patients admitted to the program for that year. The total number of medical services in 1976 were 204,094 and ancillary services, 93,141.

Roger Lewis, a second-year medical student at West Virginia University, presented a paper on "An Evaluation of Potentially Preventable Perinatal Mortality in West Virginia for 1975". He presented data showing that West Virginia ranked 46th in infant mortality rate and 50th among the states as regards infant mortality for white children. His goal was to determine if the high infant and fetal mortality rates were due to socio-economic factors, or to problems in health delivery care. Reviewing the matched birth-death certificates, the details were abstracted onto a record form. The discussant felt that the greatest decrease in infant mortality could come through improved health care, better care of obstetrical complications and better pediatric care by immediate referral of perinatal complications to tertiary centers when neonatal intensive care units are not available. Our Committee recommends that the Committee on Committees of the West Virginia State Medical Association set up a committee to study perinatal deaths. Doctor Hunter and Mr. Lewis are willing to meet with the West Virginia State Medical Association Executive Committee to discuss the formation of such a study.

Following the business portion of the meeting, the Committee then proceeded to a study of seven abstracts of maternal deaths available at this time, and developed recommendations on the basis of case material reviewed.

Respectfully submitted,
T. Keith Edwards, M.D.
Chairman
Frederick H. Dobbs, M.D.
Secretary

October 15, 1977

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Abdominal Angina

Robert J. Gardner, M. D.; Thomas J. Tarnay, M. D.; Dominic A. Antico, M. D.; Nancy L. Gardner, B. A.; and Alvin L. Watne, M. D.

It is the purpose of this paper to present several syndromes of chronic intestinal ischemia illustrated by brief case reports.

Chronic arterial insufficiency of the abdominal alimentary tract results in a syndrome which has been variously termed abdominal angina, intestinal angina, and splanchnic ischemia. The autopsy findings were first observed by Kussmaul[5] in 1906. Klein,[4] in 1921, gave an accurate clinical description and Dunphy,[2] in 1936, reported a patient with abdominal pain after eating and weight-loss who eventually died of an infarcted gut due to atherosclerosis of the visceral arteries. Postmortem examination showed the patient was free of coronary artery disease. Thus, for the first time intestinal angina and angina pectoris were accurately separated, both clinically and pathologically. Mikkelsen,[6] in 1959, reported the first case of intestinal angina successfully treated surgically.

Clinically, it is important to diagnose the visceral artery lesions before total occlusion occurs with necrosis of the small bowel. Of secondary importance is surgically relieving the chronic complaints which may be incapacitating.

Case 1. A 55-year-old white female was admitted on March 20, 1971, for evaluation of postprandial abdominal pain of two years' duration and weight-loss of 10 pounds in recent months. The physical examination was negative except for a harsh systolic epigastric bruit. Workup included a normal upper GI series, small bowel series, and barium enema. Selective visceral arteriograms revealed stenosis of the celiac trunk and complete occlusion of the superior mesenteric artery (SMA). The inferior mesenteric artery (IMA) was patent and filled the left colic artery (Figure 1). On April 1, 1971, reversed saphenous vein grafts were placed from the aorta to the hepatic and SMA. Recovery was uneventful and the abdominal pain has disappeared on followup examinations.

The Authors

- **Robert J. Gardner, M. D., and Thomas J. Tarnay, M. D., Department of Surgery; and Dominic A. Antico, M. D., Department of Radiology, West Virginia University Medical Center, Morgantown; Nancy L. Gardner, B. A.; and Alvin L. Watne, Department of Surgery, WVU Medical Center.**

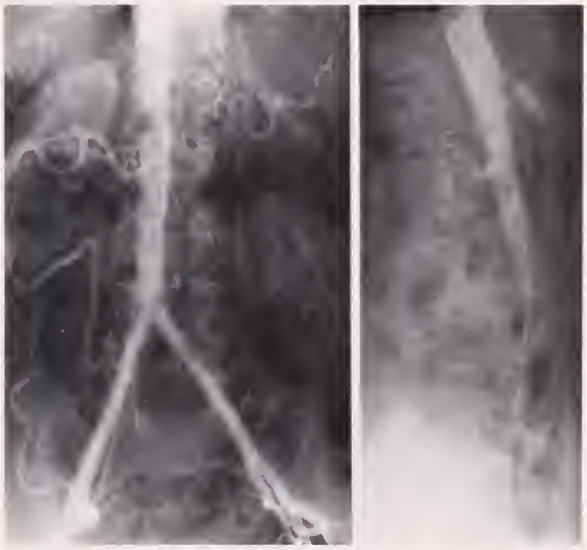

Figure 1. AP and lateral aortograms showing 90 per cent stenosis of the celiac and total occlusion of the SMA.

Comment

This patient illustrates the usual intestinal angina caused by two-vessel disease. The symptomatology of chronic intestinal ischemia is variable, but pain after eating, weight-loss due to voluntary starvation and diarrhea are characteristic; it has been appropriately termed the small meal syndrome. The physical examination is notoriously inaccurate and may be normal; however, the patient usually is in atherosclerotic age group, appears chronically ill, and shows signs of recent weight-loss. Radiologic examinations such as an upper gastrointestinal series, small bowel series and a barium enema, are usually not helpful.

Confirmation of the clinical impression is dependent upon aortograms in the lateral position and selective arteriograms. Fry[3] was one of the first to emphasize that at least two of the three visceral arteries must be partially obstructed before intestinal angina occurs because of the rich anastamotic connections between the visceral arteries. Almost always the superior mesenteric artery is one of the vessels involved. The treatment is bypass-grafting of the involved arteries.

Case 2. A 58-year-old white female was admitted on February 9, 1976, complaining of severe abdominal cramping pain made worse by eating and a 40-pound weight-loss in the previous five months. There was no diarrhea or constipation. The physical examination revealed an alert, cooperative female who appeared wasted and cachectic. She appeared much older than her stated age and chronically ill. The radiologic examinations were normal except that abdominal arteriograms showed complete occlusion of the celiac and SMA. The IMA was greatly dilated and meandering (Figure 2).

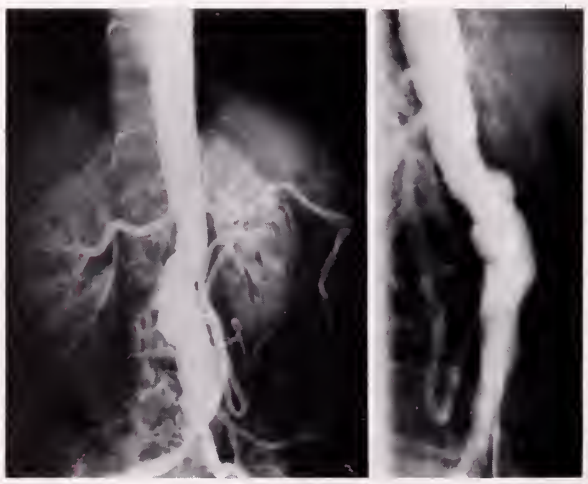

Figure 2. AP and lateral aortograms of Case 2. Note large meandering mesenteric artery arising from IMA. Celiac and SMA are occluded. See text.

Her hospital course was one of complete deterioration, and she died on February 16, 1976. Autopsy was not granted.

Comment

Total occlusion of the celiac and SMA may lead to a huge meandering mesenteric artery that attempts to supply virtually the entire intra-abdominal gut. The above case is a classic illustration. Most of the reports[9] alluding to this circumstance describe the catastrophic events following ligation or steal from the meandering mesenteric artery during the course of another surgical procedure such as abdominal aortic aneurysm resection or aorto-femoral bypass grafting. In our patient, before hyperalimentation therapy to reverse the catabolic process could be effective, the patient expired. In rare instances, all three visceral arteries are totally occluded and the gut is viable from lumbar artery collaterals.

Case 3. This is a 35-year-old white female who entered the hospital on March 31, 1974, complaining of a nonspecific abdominal pain and weight-loss of 10 to 15 pounds. Physical examination showed a thin, anxious woman in no particular distress.

An extensive workup followed. The only positive finding was a 90 per cent stenosis of the celiac artery consistent with celiac compression by the crus of the right diaphragm.

On April 9, 1974, she underwent celiac artery bypass using a reversed saphenous vein. Flow rates in the celiac branches increased 50 per cent. She was discharged much improved on April 18, 1974. Since then she has done poorly, having returned to the outpatient clinic with multiple bizarre complaints. Postoperative arteriograms

Figure 3. Pre- and postoperative lateral aortograms of Case 3. Note 90 per cent stenosis of celiac corrected by dissecting free the celiac axis and a bypass graft. SMA is open in both films.

show the celiac artery and graft to be widely patent. Figure three demonstrates pre- and post-operative aortograms.

Comment

The initial wave of enthusiasm following Dunbar's *et al*[1] original description of the external compression syndrome has largely subsided. Opposing points of view concerning the syndrome have been well-presented by Stanley[7] and Szilagyi.[8] Our experience has been disappointing and operation is now reserved for patients with single-vessel disease only if the full-blown syndrome of abdominal angina is present in an emotionally stable patient in the atherosclerotic age group.

Case 4. A 73-year-old white female was admitted to the University Hospital on September 6, 1973, with a one-year history of abdominal pain, diarrhea, and a 30-pound weight-loss. She described the pain as cramping in nature, mid-abdominal in location, and precipitated by ingestion of food. Physical examination revealed an elderly female who appeared chronically ill. Her blood pressure was 110/80 mm. Hg., pulse rate of 84/min., and her rectal temperature was recorded at 37°C. Examination of the heart and lungs was normal. The abdomen was scaphoid, and mild tenderness and muscle-guarding in the epigastrium were present. A systolic bruit was intermittently heard about the umbilicus and the bowel sounds were hyperactive.

Figure 4. Lateral Aortogram Note the marked celiac axis stenosis and poststenotic dilatation (large arrow and inset). Dilated pancreaticoduodenal arcades providing collateral flow from the normal SMA to the celiac are well shown (small arrows).

Figure 5. Left posterior oblique: The long stenotic segment of the celiac is better seen (large arrow). Note the poor flow to the hepatic artery (small arrow).

A routine blood count, urinalysis, BUN, and serum electrolytes were normal. An SMA 12/60, serum and urine lipase, EKG, chest x-ray, and a complete GI series were normal. An abdominal aortogram and selective arteriograms (Figures 4-6) revealed a stenotic celiac artery and no evidence of obstructive lesions in the superior or inferior mesenteric arteries. Selective superior mesenteric artery angiograms showed the hepatic and splenic arteries to fill retrograde mainly from gastroduodenal and pancreaticoduodenal collaterals.

On September 20, 1973, surgery was performed. The abdomen was carefully explored for other possible causes of the abdominal pain, but none was found. As exposure of the celiac axis was obtained, the vessel was found to be stenotic from atherosclerotic changes. The hepatic artery at its origin from the celiac was also partially

Figure 6. Left posterior oblique: Superior mesenteric artery injection clearly shows the dilated pancreaticoduodenal arcades (small arrows) providing collateral flow to the celiac axis (large arrow) and its branches.

Figure 7. A postoperative arteriogram shows the patent aorta-hepatic graft, and the increased size and forward flow in the hepatic arterial tree.

obstructed by plaques. Mean aortic pressure was 98 mm. of Hg., and mean hepatic artery pressure was 72 mm. of Hg. A reversed saphenous vein graft was placed end-to-side from the aorta to the common hepatic artery distal to the obstruction. Since a large portion of the "steal" was to the splenic artery, it was ligated and the spleen removed. The previously noted pressure gradient was now abolished. Since the operation, the abdominal pain and diarrhea have disappeared and the patient has gained 20 pounds. A postoperative arteriogram revealed the vein graft to be patent and functioning (Figure 7).

Comment

We wish to emphasize single-vessel intestinal ischemia is very uncommon, but occasionally does exist. This patient is now 35-months postoperative, has gained her lost weight, and the abdominal pain has disappeared. She has no other complaints.

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Stokes-Adams Attack In Prinzmetal Variant Angina

(Report of Two Cases and Review of the Literature)

Gita Roy, M. D.; Harold Selinger, M. D.; and William H. Carter, M. D.

Transient complete heart block causing seizures occurred in two patients during episodes of Prinzmetal variant angina. Both patients had normal coronary angiograms and a His bundle study done in one patient was normal. Nineteen of 21 previously reported cases of complete heart block occurring during angina occurred in patients with Prinzmetal variant angina. Coronary arteriograms demonstrated no fixed obstructive lesions in those nine patients studied.

The Authors

- **Gita Roy, M. D.; Harold Selinger, M. D.; and William H. Carter, M. D., all from the Department of Medicine, Charleston Area Medical Center, Charleston, West Virginia.**

It is well known that angina pectoris may be associated with transient disturbances of cardiac function such as congestive heart failure,[1] mitral insufficiency,[2] and ventricular fibrillation.[3] However, it is not generally appreciated that transient, symptomatic, complete heart block may be a complication of angina. This report describes two patients in whom episodes of Prinzmetal variant angina were associated with syncope and seizure activity which were proven to result from transient complete heart block. Twenty-one case reports of angina associated with similar findings are reviewed.[4-21]

The fact that 19 of the 21 similar cases had Prinzmetal variant angina, as opposed to the much more common conventional type of angina pectoris, suggests that patients with Prinzmetal variant angina are unusually susceptible to Stokes-Adams attacks. Since patients with variant angina are often mistaken to have non-cardiac pain, seizure activity in such patients may be interpreted incorrectly as a primary neurological problem.

Case One

A 43-year-old housewife was admitted to Memorial Division, Charleston Area Medical Center in September, 1973, for evaluation of chest pain and syncope. She had been in good health until March, 1973, when she started to have severe substernal pain in the early morning hours. The pain generally lasted 30 to 60 minutes, and was often associated with syncope; on at least three occasions it was associated with fecal and urinary incontinence. Physical examination when she was not having pain was normal. Routine blood, urine, and chemical tests were all within normal limits; a chest film showed scarring in the left mid-zone, but normal cardiac silhouette; the electrocardiogram (ECG) was normal (Figure 1).

She was telemetered and allowed to walk around. Three days after admission she described a relatively mild attack of angina followed by syncope and urinary incontinence. The

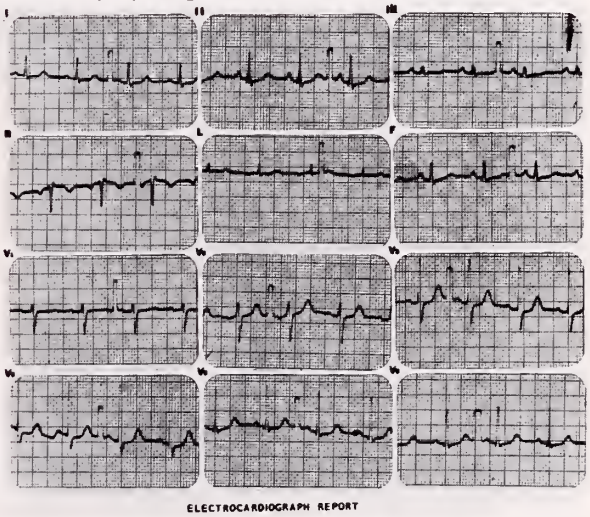

Figure 1. Admission to emergency room.

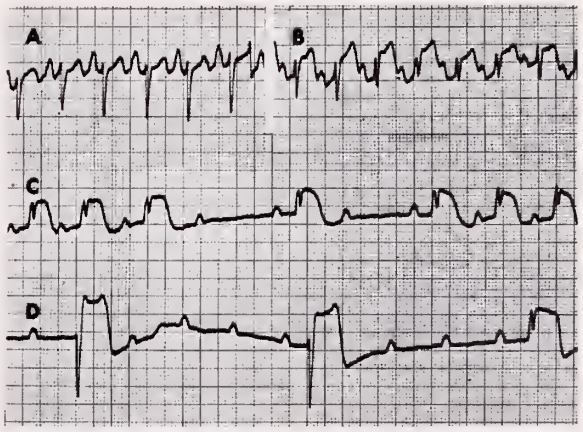

Figure 2 (A, B, C, D). Patient developed in succession sinus tachycardia (A), sinus tachycardia with ST elevation (B), Mobitz Type 1 heart block (C), and finally complete heart block (D).

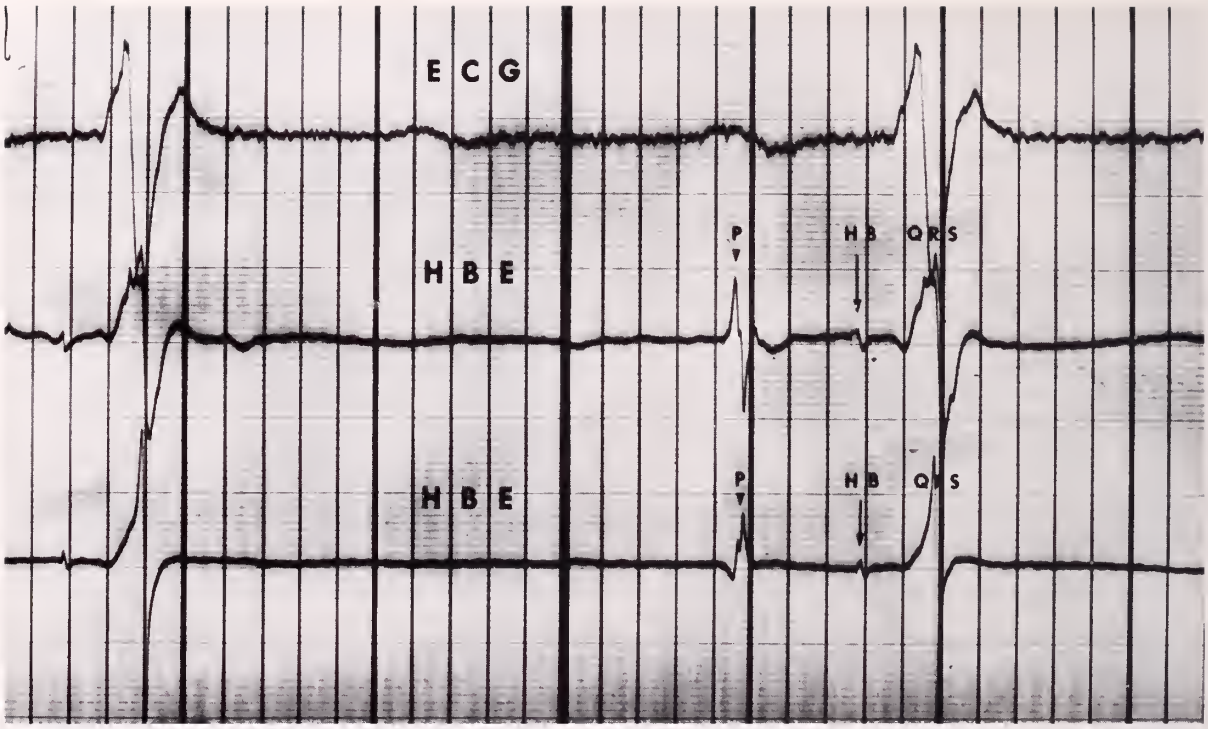

Figure 3a. Resting His bundle electrogram. Note the normal P-HB interval of 120 milliseconds and HB-V interval of 45 milliseconds.

telemetered ECG revealed sinus tachycardia (Figure 2A), followed 30 seconds later by marked elevation of the ST segments (Figure 2B). Ten seconds later she developed Mobitz Type 1 heart block (Figure 2C), and finally, complete heart block developed with a ventricular rate of approximately 20/minute (Figure 2D). Within minutes, the ECG returned to normal. A temporary transvenous demand pacemaker was inserted. At this time, a His bundle electrogram was recorded during sinus rhythm, and with right atrial pacing up to a rate of 140/

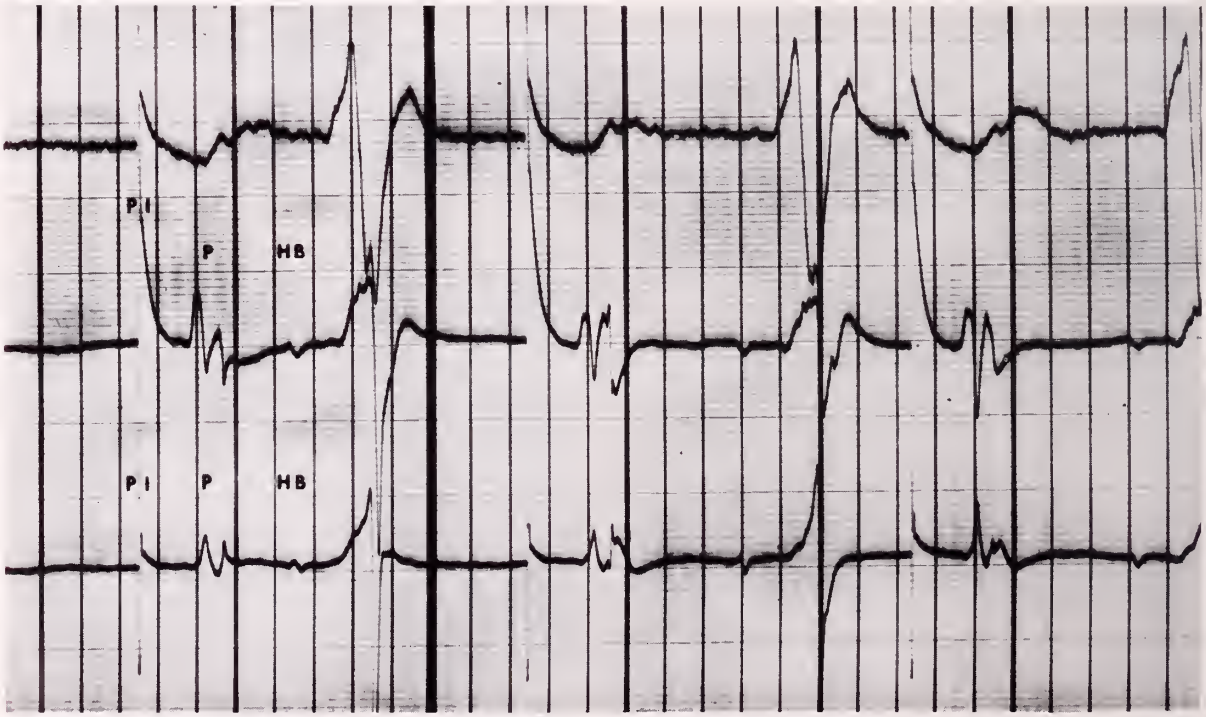

Figure 3b. Atrial pacing at heart rate of 140 (PI-pacing impulse). Note PI-HB interval increases normally to 160 milliseconds and H-V interval remains constant at 45 milliseconds.

minute. The AH interval prolonged as normally expected from 120 milliseconds at rest to 160 milliseconds at a rapid atrial pacing rate, but the H-V interval was normal both at rest and during atrial pacing (Figures 3a and 3b).

The following day, a permanent, demand pacemaker was inserted and the patient was discharged on the 10th hospital day. Since then, she has continued to have similar chest pains, on occasion with dizziness, but without seizures of incontinence. During a readmission in January, 1974, the pacemaker captured her ventricle during periods of carotid massage; however, during massage, she experienced pre-syncope similar to that occurring in association with chest pain. At cardiac catheterization, normal left ventricular size and contraction were demonstrated by angiography. The coronary arteries were normal before and after nitroglycerin (Figures 4a and 4b) in multiple projections. The left ventricular pressure was 108/0-7 before angiography and 110/0-17 after angiography. The cardiac index by dye dilution was 2.7 L minute. At the end of the study carotid massage slowed the intrinsic heart rate until the pacemaker achieved capture at 60/minute, at which time the systolic blood pressure had fallen from 120 to 80 mmHg. During this drop in systolic blood pressure, she felt dizzy.

Since catheterization, treatment has included different combinations of oral and sublingual nitrites, propranolol and phenoxybenzamine hydrochloride. Despite these measures, she has continued to have occasional episodes of chest pain, at times associated with dizziness and, on one occasion, with syncope and fecal incontinence. An attempt is being made to control her symptoms with belladonna compounds and if this is not successful, possibly sympathectomy will be considered.

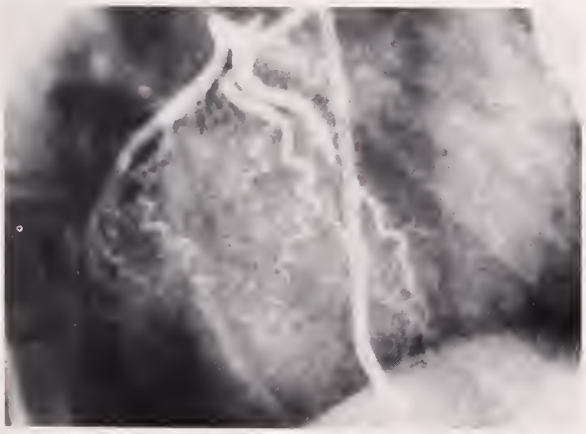

Figure 4a. Normal left coronary arteriogram in the LAO projection.

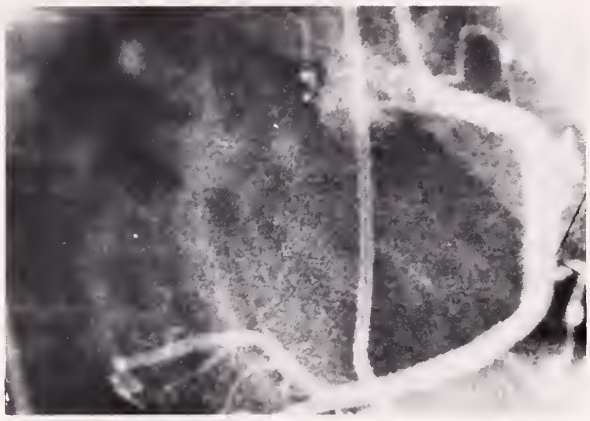

Figure 4b. Normal right coronary arteriogram in the LAO projection.

Case Two

A 55-year-old woman with a history of angina for three years was admitted to the coronary unit with a five-hour history of severe precordial pain radiating towards the left arm and associated with diaphoresis. She was alert, though apprehensive. The pulse was 85/minute and the blood pressure 150/100 mmHg. Cardiac examination was normal. Routine laboratory tests including serial measurements of CPK, LDH, and SGOT were normal. A chest film showed no cardiac enlargement, but blunting of the costophrenic angles was present. An initial ECG revealed inversion of the T waves in lead I and aVL with borderline ST depression and T wave inversion in V4 through V6 (Figure 5).

Several hours after admission to the unit, the oscilloscope demonstrated ventricular fibrillation following a period of marked bradycardia; the latter was most likely due to complete heart block. Following defibrillation, she developed transient complete heart block, but within minutes the ECG pattern reverted to normal; however, none of these abnormalities was recorded

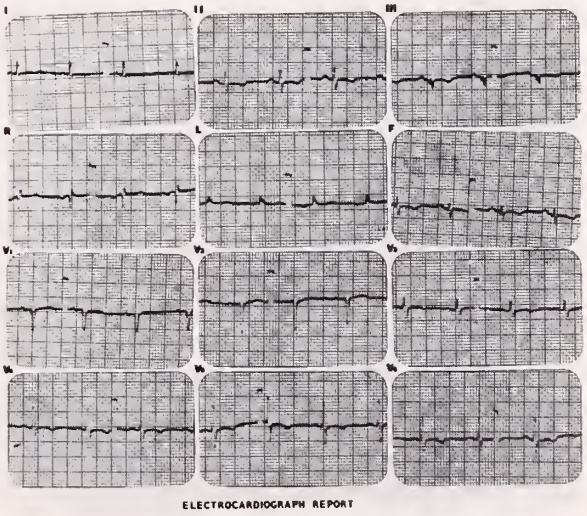

Figure 5. Admission ECG.

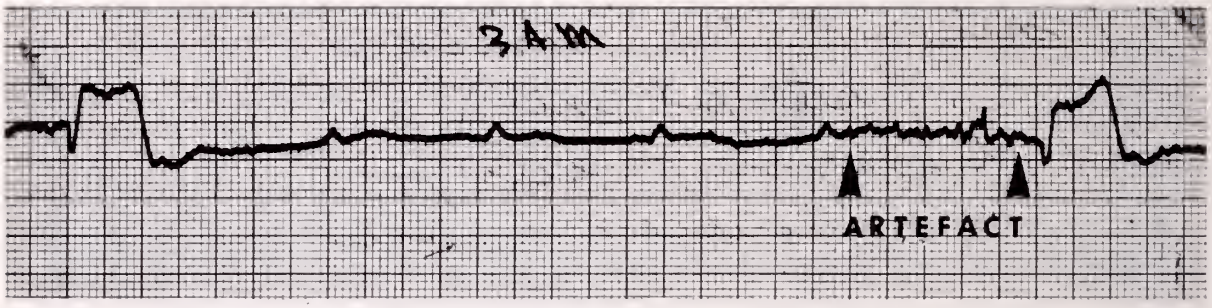

Figure 6. Telemetry recording taken at time of seizure. Note artefact due to onset of seizure.

on paper. Serial enzyme measurements and ECG revealed no evidence of myocardial infarction. A temporary pacemaker was inserted, but removed on the ninth day because no further untoward events had occurred; the patient remained on telemetry, however. Early the next morning, she awoke in her private room and found herself wet with urine and vaguely recalled having had chest pain. Review of the telemetered ECG revealed transient complete heart block (Figure 6) which within minutes returned to normal sinus rhythm. Further serial enzymes and ECG's again revealed no evidence of myocardial infarction. A permanent, demand pacemaker was implanted and she was discharged. She had no further syncope and has only had mild chest pain. Coronary angiograms performed May, 1974, at the Cleveland Clinic were normal.

Discussion

Nineteen of 21 reports of documented complete heart block during angina occurred in patients with Prinzmetal variant angine (Table 1). Although about half the patients in Prinzmetal's original report had arrythmias, only one had documented complete heart block.[8] Prinzmetal variant angina is not a homogenous clinical syndrome, but rather a broad spectrum of symptomatic, electrocardiographic and pathologic abnormalities.[22] However, since we found only two cases of syncope from complete heart block occurring during conventional angina, it seems

TABLE 1

Angina Associated With Stokes-Adams Syndrome

Source	*Age*	*Sex*	*Pace-maker*	*Symptoms*	*Type of Angina*	*Coronary Angiography*	*Follow-Up*
Nadal-Ginard, B., et al (4)	63	M	+	Intense pain	P	—	Asymptomatic
Cosby, R. S., et al (5)	46	F	+	Syncope	P	Normal	Died
Whiting, R. B., et al (6)	52	F	+	Syncope	P	Normal	Exertional angina
Botti, R. F. (7)	72	M	—	Presyncope	P	—	Asymptomatic
Prinzmetal, M., et al (8)	—	—	—	Syncope	P	—	—
Schwartz, L. S., et al (9)	68	M	—	Syncope	P	—	Died
Bouvrain, Y., et al (10)	59	M	—	Syncope	P	—	DMI
Gianelly, R., et al (11)	49	F	+	Syncope	P	Minimal narrowing	Died
Division of Cardiology (12) Hahnemann Medical College Philadelphia, Pa.	60	F	+	Syncope	P	Spasm	—
Carleton, R. A., et al (13)	41	M	—	—	P	Spasm	—
Lasser, R. P., et al (14)	71	M	+	Syncope	P	—	Asymptomatic
Buonanno, C., et al (15)	51	M	—	—	P	Normal	Improved
Hart, J. N., et al (16)	58	M	+	Pain	P	Spasm and congenital anomaly	Unsuccessful bypass surgery
Cherrier, F., et al (17)	38	M	+	Syncope	P	Normal	Syncope persisted
Cherrier, F., et al	61	M	+	Syncope	P	—	Pain persisted
Kastor, A. J. (18)	64	M	—	Syncope	P	—	Died
Cliche, P., et al (21)	78	M	+	Syncope	P	—	No syncope
Cliche, P., et al	80	F	—	Syncope	P	—	No syncope
Oliva, P. B., et al (20)	46	F	—	Dizziness	P	Spasm	Asymptomatic
Dolara, A., et al (19)	55	M	—	Pain	C	—	—
Dolara, A., et al	77	M	—	Pain	C	—	—

P—Prinzmetal angina.
C—Conventional angina.

likely that Stokes-Adams attacks represent one of the more unusual manifestations of variant angina.

It is likely that an intense vagal reaction is the mechanism responsible for transient heart block and syncope in these patients. Support for this is provided by the normal QRS configuration and His bundle study obtained following syncope in Case One. The persistence of dizziness with hypotension, in association with several episodes of chest pain in Case One following the pacemaker insertion, suggests that a hypotensive vagal response persisted even though the bradycardia due to the vagal reflex was prevented by a pacemaker.

Yasue[23] has suggested that increased vagal activity initiates variant angina and he reports successful treatment of one patient with atropine. They postulate that the vagus nerve causes reflex hyperactivity of the sympathetic nerves which provides the main autonomic innervation of the large coronary arteries.

Syncope was a striking clinical feature in the two cases described here. Case One was initially felt to have either a hyperventilation syndrome or a seizure disorder. The clinical history of Case Two also simulated that of a primary seizure disorder and only on the 10th hospital day was she shown to have transient complete heart block by telemetry.

Fatal syncope resulting from heart block is generally due to a disease in the distal His-Purkinje system, associated with prolonged QRS interval, and frequently prolonged PR interval.[24] The absence of any conduction abnormality in the ECG during asymptomatic periods, together with the normal His bundle study at rest and during rapid atrial pacing in Case One, could have led to the erroneous conclusion that the syncopal episodes were unrelated to abnormalities of AV conduction.

Coronary angiograms failed to demonstrate significant anatomic narrowing in our two cases and in all of the nine reported cases in whom coronary angiography was performed. One patient had congenital absence of proximal two centimeters of the right coronary artery but normal retrograde filling at catheterization and no distal obstruction of the vessel was demonstrated at surgery.[16] Spasm was demonstrated in the circumflex artery in this patient and has also been demonstrated at catheterization in three other patients.[12,13,20] In contrast to this select group of patients with AV block and variant angina, all 12 cases of variant angina reported by McAlpin, and two cases studied by Silverman, had single- or multiple-vessel obstructive disease.[25,26] At present, therefore, Stokes-Adams attacks associated with variant angina suggest that spasm rather than fixed obstruction exists.

Oliva *et al*[20] reported alleviation of the coronary artery spasm and ischemic pain by nitrites during coronary angiography and they found sublingual isosorbide dinitrate given every two hours to prevent completely their patient's angina and AV block. Such a dosage schedule is obviously difficult, especially when the episodes of angina occur in the early morning hours.

Nine of the 21 previously reported patients were treated with pacemakers. Three subsequently died suddenly, one from proven ventricular fibrillation. One patient continued to have syncope at home, possibly due to persistence of vagally-induced hypotension.

Bypass surgery distal to an area of spasm was unsuccessful in the only case in this series to have surgery. It is unknown whether the spasm that produced such angina occurs consistently in one area or in several areas of the same, or even different branches of the coronary circulation. Thus, at present, it is difficult to recommend surgery for this group of patients.

The long-term prognosis of patients with variant angina associated with transient complete heart block is not known. However, it seems likely that bradycardia, sufficiently severe to cause syncope, might eventually cause death from either ventricular fibrillation or asystole. Although there is a debate concerning the danger of moderate sinus bradycardia during myocardial ischemia or infarction, there is firm evidence that extreme degrees of bardycardia predispose to ventricular fibrillation in the ischemic myocardium.[27] Until further experience is accumulated, the relative roles of pharmacological management, permanent cardiac pacing, and coronary bypass surgery remain speculative.

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Medical Grand Rounds

From the West Virginia University Medical Center

Edited By

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Associate Professor of Medicine

Antibacterial Prophylaxis: Ideas Old and New

Discussant: Roger G. Finch, M. D.

Roger G. Finch, M. D., Assistant Professor of Medicine, Division of Infectious Diseases.

One third of all hospitalized patients on any given day will be receiving a systemic antimicrobial agent.[1] Since this was not the case 10 to 15 years ago, it is worth reflecting on the possible reasons. The overall incidence of infective conditions admitted to the hospital, or occurring following hospitalization, has not increased proportionately to the increased use of antibiotics. New indications for antibacterials have been described following improvements in diagnosis and advances in therapeutic techniques, particularly in the field of surgical practice and the management of patients with lympho-proliferative or myelo-proliferative disorders; these include a number of situations where the use of antibacterial prophylaxis has been studied and the results indicate significant advantage in carefully defined circumstances. Some of these recent indications together with some accepted indications for antibacterial prophylaxis will be discussed shortly. However, much evidence suggests that the major factor for this increased usage of antibiotics is irrational prescribing on the part of the physician.[1]

Rational versus Irrational Prescribing

What is meant by rational or irrational prescribing of antibiotics? Antibiotic usage can be considered rational if the dose, route of administration, frequency, and duration of use are appropriate for the infection which is present or suspected. Irrational usage includes administration without indication, namely, in the absence of confirmed or suspected infection or, as prophylaxis under circumstances of unproven efficacy, or by the use of a clearly inappropriate route, dose or preparation.

Roberts and Visconti[1] reported on a one-month survey of antibacterial usage in 1,035 patients admitted to a 500-bed nongovernmental community hospital. One third (340) were receiving antibacterials; 36 per cent for infection, 54 per cent prophylactically, and 10 per cent symptomatically. The assessment by a team of infectious diseases physicians and Ph. D. pharmacists judged the therapies as rational in 13 per cent, irrational in 66 per cent, and questionable in 21 per cent of the patients. It is worth noting that adverse reactions to antimicrobial therapy were experienced by 14 per cent of the patients. Although no similar statistics are available for WVU Medical Center, there is some evidence for over-prescribing; the cost of antibiotics in 1975-76 was 25 per cent higher than the figure for the preceding 12 months and exceeded $316,000. Although this is a crude indicator of antibiotic-usage, because of wide variations in the cost of drugs, it does show a massive increase in the use of cephalosporins with cephalothin accounting for more than a third of this bill.

For these reasons, it is important to rationalize our prescribing habits, particularly in the area of antibacterial prophylaxis. There are some well-established indications for antibacterial prophylaxis which have been scientifically studied and shown to be effective; others, although widely accepted, remain of questionable value. In addition, antibacterial prophylaxis is currently being explored with new agents or with established agents in the light of advances in our understanding of infection.

Poststreptococcal Rheumatic Fever

The incidence of acute rheumatic fever is falling. However, carditis remains the most serious complication and has been recorded by

Perry[2] in 74 per cent of 1,033 patients suffering their first attack of rheumatic fever and followed up until death, or for periods ranging from five to 40 years. Before the introduction of penicillin, recurrent attacks of streptococcal infections with progression of cardiac disease, or producing cardiac disease for the first time in those who escaped this complication with their first attack, have been described in up to 85 per cent of patients in published series.[3] These recurrences occur most frequently within four years of the initial attack. Penicillin prophylaxis has reduced the recurrence rate to 4 per cent.

In an attempt to determine which preparation of penicillin and which regimen was the most effective in preventing recurrences, Wood *et al*[4] followed up 471 patients after a first attack of rheumatic fever over five years. Three groups were given one of the following regimens: (1) benzathine penicillin 1.2 million units IM once monthly, (2) potassium penicillin 200,000 units daily by mouth, or (3) sulfadiazine 1 gm. daily by mouth. This study confirmed the superiority of benzathine penicillin, and it subsequently has been confirmed by others to be the best prophylactic agent. In addition, it is remarkable that the group A streptococcus has remained fully sensitive to penicillin.

Infective Endocarditis

Deformed cardiac valves resulting from either congenital or acquired disease, and other congenital cardiac defects such as patent ductus arteriosus, are at risk for developing bacterial endocarditis following an episode of bacteremia.

Antibiotics have reduced the mortality of established endocarditis from 100 per cent to 30 per cent and, in bacteriologically-proven cases, to 15 per cent. However, the value of antibiotic prophylaxis to "cover" surgical procedures in patients with valvular heart disease has not been satisfactorily answered despite the almost universal administration of antibiotics before dental manipulation and other operative procedures.[5] The basis for the practice appears to be the "accepted fact" that about 25 per cent of patients with infective endocarditis are said to have had some type of dental manipulation before the onset of the disease. To establish the true risk would require studying the incidence of endocarditis in cardiac patients undergoing a particular surgical procedure. Ethical considerations militate against a conclusive study of this nature.

More recently, other invasive procedures have been found to produce bacteremia, thereby increasing the number of situations where antibacterial prophylaxis needs to be considered for those predisposed to endocarditis. Percutaneous liver biopsy has caused transient bacteremia in 14 per cent of 89 patients.[6] The bacteria isolated were intestinal in half the patients, but the remainder were not and, surprisingly, three of these included pneumococci. Sigmoidoscopy involves instrumentation of an epithelial surface lined with feces containing 10^9 to 10^{11} bacteria/gm. wet weight. Therefore, it is not surprising to find in a series of 200 patients, of whom approximately half had colorectal disease and half did not, that 19 had transient bacteremia with gut organisms.[7] A similar study by Gorbach and associates,[8] however, failed to detect a single case of bacteremia in 54 patients undergoing routine sigmoidoscopy, using a similar protocol.

Despite inconclusive confirmation of the value of antibiotics in the prevention of bacterial endocarditis, I feel that antibiotic prophylaxis should be given. The choice of agent or agents is influenced by the procedure and the known microbial flora at that site.

In the mouth, the viridans group of streptococci are the bacteria most frequently causing infective endocarditis. Dental manipulation or tonsillectomy should be "covered" with antibiotics aimed at destroying these bacteria as they enter the circulation and before they colonize a deformed valve. Penicillin is the drug of choice and if given by injection one hour before surgery, adequate levels will be present to eradicate any subsequent bacteremia. Twenty-four to 48 hours' therapy is perfectly adequate to achieve this end.

The decision to commence penicillin several days before surgery to "sterilize" the mouth is extremely dangerous; the effect is to eliminate the sensitive streptococci from the mouth and permit the minority of more resistant strains to multiply. These resistant streptococci are certainly present in the saliva of patients having penicillin treatment and appear within two days. The occurrence of endocarditis with these organisms following penicillin "coverage" for several days is well-described.[9]

The question of timing of dental procedures in a patient with confirmed or suspected infective endocarditis often raises questions. Recurrences have occurred with resistant bacteria when dental surgery is carried out after a six-week course of penicillin. To avoid this, an early dental consult at the time of admission to define which dental procedures are necessary is recommended. Arrangements can then be made for them to be carried out on the day the definitive course of antibiotics for the underlying endocarditis is

started, thereby overcoming the problem of bacteremia associated with the procedure and also avoiding the development of resistant strains.

For procedures below the diaphragm, antibiotic prophylaxis is directed towards the enterococcus. Gastrointestinal, genito-urinary procedures and childbirth predispose to enterococcal endocarditis. The enterococcus is approximately 200 times less sensitive to penicillin than most viridans streptococci. However, the combination of penicillin and an aminoglycoside, such as gentamicin (Garamycin) or streptomycin, is synergistic for most strains and is recommended to "cover" procedures which predispose to enterococcal bacteremia. Again, it should be started one hour before the procedure and continued for a maximum of 48 hours.

For penicillin-hypersensitive individuals, vancomycin (Vancocin) is substituted, although cephalothin (Keflin) or cefazolin (Kefzol) have also proved effective; but the 10 per cent incidence of cross-hypersensitivity between the cephalosporins and penicillin should be kept in mind. The need for an aminoglycoside remains with these alternatives to penicillin.

Prosthetic Valve Endocarditis

The incidence of infection on a prosthetic heart valve is about one per cent, but mortality exceeds 50 per cent.[10] Of interest is the bimodal relationship between the causative agent and the time of onset following surgery.

In the Mayo Clinic Series,[10] the early-onset group with a mean date-of-onset of 17 days after surgery (range one to 35 days), showed a predominance of *Staphylococcus aureus* (44 per cent) and gram-negative bacilli (37 per cent). In contrast, in the late-onset group with a mean date-of-onset of 26 months after surgery (range 72 days to 10 years), the bacteria isolated included viridans streptococci (41 per cent), group D streptococci (10 per cent), Gram-negative bacilli (31 per cent) and *Staphylococcus aureus* (10 per cent). Other studies have shown a similar incidence of infections but have included a significant number of early infections caused by *Staphylococcus epidermidis*.[11]

The pattern of isolates from the early-onset cases is compatible with the introduction of infection at the time of surgery, which is lengthy and involves periods of hypothermia, extracorporeal circulation, and the introduction of prosthetic material which all increase the risk of infection.[11] The late-onset isolates suggest a more "normal" distribution of pathogens that one associates with infective endocarditis when similar epidemiological factors are operative and similar "rules" for prophylaxis apply.

Prophylaxis of the surgical procedure, therefore, should be directed towards those bacteria most likely to be introduced at the time of operation. The combination of methicillin or oxacillin with gentamicin given by injection one hour before surgery will insure adequate bactericidal levels during the procedure and is effective against *Staphylococcus aureus, Staphylococcus epidermidis* and gram-negative bacilli. Therapy of 48 to 72 hours' duration is adequate.

Lower-Limb Amputations and Gas Gangrene

Parker[12] drew attention to the importance of gas gangrene complicating lower-limb amputations in patients with obliterative arterial disease, particularly those with diabetes mellitus. The skin of the buttocks and thigh is contaminated with fecal flora including *Clostridium perfringens* (*welchii*). An ideal medium for anaerobic bacteria to flourish is produced by the tissue damage and low-oxygen tension due to impaired blood supply. Parker obtained particulars of 56 cases of gas gangrene resulting in 31 deaths.[12] No patient who developed clostridial sepsis was receiving adequate penicillin on the day of operation; this means benzylpenicillin 0.5-1 million units every 6 hours for three days beginning one hour before surgery. Erythromycin is the alternative in patients with penicillin-hypersensitivity.

Gastrointestinal Surgery

Infective complications following gastrointestinal surgery cause serious morbidity and significant mortality. Antibiotics have been used in the management of these infections from the early days of their introduction and have contributed significantly to the management of established infections.

The administration of antibiotics following surgery for a perforated viscus is not true prophylaxis, but treatment of established infection, since bacterial contamination of tissues is inevitable in these situations. However, the use of antibiotics during the perioperative period for elective gastrointestinal surgery was pioneered by Bernard and Cole,[13] who gave three doses of an antibiotic regimen by injection. This included penicillin, methicillin and chloramphenicol, and was given before, during, and a few hours after surgery. By producing bactericidal levels in the tissues at the time of surgery, they obtained an infection rate of only five per cent in treated patients, compared with 25 per cent in control patients. Several other studies using penicillin or

a cephalosporin alone or in combination with an aminoglycoside given in a similar manner have confirmed the effectiveness of this regimen.[14-16]. Our increased knowledge of the normal bowel flora and the recognition of the importance of anaerobic bacteria and their antimicrobial susceptibility, following improvements in laboratory isolation techniques, have helped our understanding as to why these regimens are effective.

Another approach to antibiotic prophylaxis is in the area of colorectal surgery, where infection rates without the use of antibiotics have ranged from 20 to 62 per cent.[17-18] The use of oral prophylaxis in combination with adequate purgation is again being studied—using antibiotics known to be effective against both the aerobic and anaerobic flora of the colon. Two regimens chosen for their effectiveness against the normal flora have been studied in prospective randomized clinical trials. These trials have used neomycin in combination with either tetracycline[19] or erythromycin[20] given in three doses during the 48 or 24 hours before surgery, together with a low-residue diet and vigorous purgation of the bowel. Although these regimens do not sterilize the gut at the time of surgery (an impossible task), only 4.6 per cent[19] of the patients given neomycin in combination with tetracycline, and 2.3 per cent[20] of those given neomycin in combination with erythromycin, developed wound infections. Both results were remarkable achievements.

These approaches to prophylaxis are logical and safe, since side-effects are unlikely from so few doses, and are evidently effective. They are to be preferred to the indiscriminate and damaging effects of systemic antibiotic treatment continued for days and sometimes weeks.

Prophylaxis in Patients with Reduced or Impaired Granulocyte Function

Severe neutropenia and agranulocytosis render a patient vulnerable to attack by microbes which are usually endogenous in origin. This is particularly true of the acute nonlymphocytic leukemias, where disease or therapy depresses the bone marrow, impairs granulopoiesis, and reduces both the cellular and humoral response to infection. In addition, cytotoxic drugs can produce mucosal ulceration and promote invasion by intestinal organisms.

The quantitative relationship between the granulocyte count and incidence of infection is well described. Patients with granulocyte counts falling below 1000/mm,^{3} and particularly below 500/mm,^{3} have a high incidence of infection.[21]

Approximately 80 per cent of infections in acute nonlymphocytic leukemia originate from five sites: lower respiratory tract, perianal-perirectal area, pharynx, urinary tract, and skin. Similarly, about 80 per cent of infections are caused by five organisms: *Pseudomonas aeruginosa, Klebsiella pneumoniae, Escherichia coli, Staphylococcus aureus*, and candida species.[22]

The management of infection in leukemias is directed towards early detection and prompt therapy with various antimicrobial regimens aimed at giving the best "cover" until the cause of infection is known.[23] More recently, research has been directed towards the prevention of infection in this group of patients. The various approaches are summarized in the Table.

TABLE

Methods Aimed at Preventing Infections in Granulocytopenic Patients

(1)	Prevention of organisms from reaching the patient by protective or reverse isolation including plastic isolators.
(2)	Reduction of invasive procedures known to predispose to infection: indwelling vascular canulas and urinary catheters.
(3)	Augmentation of host defense mechanisms: vaccines, remission of disease.
(4)	Reduction of patient's potentially pathogenic endogenous microorganisms: nonabsorbable antibiotic regimens.

The oral administration of nonabsorbable antibiotics is aimed at "decontaminating" the gastrointestinal tract, since sterilization is not possible, thereby reducing the risks of endogenous infection. In addition to the oral antibiotics, regular skin disinfection is also carried out.

Two regimens have been studied; one includes gentamicin (Garamycin), vancomycin (Vancocin) and nystatin,[22] and the other combination, used in Great Britain, includes framycetin, colistin (Coly-mycin) and nystatin.[24] Published studies have involved only small numbers of patients with or without the use of reverse isolation. The preliminary results, although not in total agreement, are encouraging—a significant reduction of both numbers of infective episodes and their severity, and also a reduction of bacteremic episodes.

There are other areas of equal interest concerning antimicrobial prophylaxis which will not be discussed here; these include the chemoprophylaxis of tuberculosis, recurrent urinary tract infection, attempts at preventing neonatal sepsis, the prevention of postoperative infections following gynecological surgery, and the use of hip prostheses impregnated with antibiotics in an attempt to reduce the incidence of staphylococcal infection in this situation.

Summary

Antibiotic prophylaxis has been examined in both "accepted" clinical areas and more recent situations where infective complications can produce serious morbidity and significant mortality.

Rational antibiotic prophylaxis requires an understanding of the particular disease process, the infective risks, and familiarity with the bacteria most frequently causing infection in a given situation. It is most likely to succeed if:

(1) it is aimed at preventing infection by a single bacterial species, (2) the organism is fully sensitive to the drug used and is likely to remain so, (3) the drug used rarely has side-effects in the dosage prescribed, and (4) for surgical procedures, short-course prophylaxis is aimed at producing bactericidal levels at the time of operation and for a few hours postoperatively.

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A message from . . .

The President

VISITING

ANOTHER name for the job of President of the West Virginia State Medical Association is "Travel."

Since September, I have traveled more than 4,000 miles and visited with societies in three other states and the District of Columbia, and attended the AMA Clinical Convention in Philadelphia.

I watched Kentucky physicians defeat a provision for continuing medical education, but approve a motion for unified membership in the American Medical Association.

In Pennsylvania, the doctors are organizing a co-op medical supply and office equipment unit and have initiated steps to form their own malpractice insurance company.

In Virginia, proposals for unified AMA membership, and requiring continuing medical education for state society membership, were defeated.

All of our component societies are to be commended on their efforts to provide continuing medical education. Drs. Robert D. Hess and L. Dale Simmons, for example, gave me insight into the exceptional family practice residency program and CME in Harrison County.

One healthy sign is that our members are communicating. Certainly, by working together, we can become stronger in professional and other ways.

I am enthusiastic! I hope you are.

John J. Mahood

JOHN J. MAHOOD, M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

KENNEDY-CORMAN

Up to now the discussion has been gentlemanly and almost academic. We have known it has been most unlikely that any major national health insurance bill would be signed into law. We have been put fairly at ease in this regard by the split between the President and Congress.

The November election results now, however, force us into a reappraisal of our position in relation to congressional national health insurance commitments. It seems certain that a good number of present incumbents read the desires of a predominant number of their voting constituents as favoring some form of national health insurance. The image of your congressman or senator standing, as it were, at the sick bed of all the loved ones of his constituents is an appealing one, particularly to congressmen and senators. It seems likely that at the first significant business upturn, whatever congressional resistance to national health insurance that remains will cease.

The success labor has had in electing its candidates dictates that the odds-on favorite for passage will be the Kennedy-Corman Bill. Thus, a confrontation seems inevitable. This is the one approach to national health insurance which medicine cannot accept. Under its terms a vast bureaucracy is set up to administer medical care under a compulsory system financed by payroll taxation.

The initial cost as estimated by its supporters, which you can rely upon to be grossly understated, will be billions of dollars more than is presently being paid yearly by government, individuals and insurance companies combined. And this for a system which will control and mete out health care to those who now can afford or are entitled to unlimited health care. A casual review of any state-supported health system reveals it to be a bottomless fiscal pit.

Let there be no mistake about it. This system will control the supply of health care totally. The sweet talk speaks of the bill supplying health care to those without it. An honest statement would be that it will ration health care to those who presently have complete access to total health care. An openly-discussed feature of the Kennedy-Corman system is the use that will be made of waiting lists in slowing down and discouraging demand.

A crowning deceit is the suggestion that care will be free. American citizens are beyond believing that anything government provides is free. What program initiated by government has ever been free? Who can name any government program ever devised which has not resulted in staggering costs in relation to whatever service was provided?

The fact that, under terms of the Kennedy-Corman Bill, physicians would be required to contract their services to the government; and that they would be functionaries of a system, minions of bureaucrats, junior clerks in a counting house, are of relatively little consequence. That they would have a degree of autonomy equivalent to that of press gangs indentured as seamen on sailing ships of old is a matter of some concern to doctors, but should be a matter of much greater concern to their patients. Doctors will not have the final say in regard to the lives, the comfort or the well-being of their patients. These matters will be taken up by committees—committees drawn from the same pool of planners who have guided other government endeavors, such as the Postal Service, to whatever success they have achieved.

The gloves must certainly come off now. Our responsibility for the good health of the Ameri-

can public demands it. We cannot passively allow the construction of a maze of bureaucratic nightmares which will ineluctably crush the spirit of American medical genius and frustrate the ill in their efforts to seek comfort.

We sincerely hope that those who should know, do know that we will not passively accept this. It would be a serious miscalculation to think otherwise. We will have more to say on this subject.

UNITY NEEDED AS NEVER BEFORE

In the face of a changing White House whose attitude toward our profession is ambiguous and possibly very dangerous, we need unity as never before.

And this means having an American Medical Association that is buttressed by a solid and representative membership. The AMA has shown that it has the moxie, the expertise, and the experience to fight all our joint fights.

But in Washington's gimlet eyes, those qualities are diluted unless the AMA also has great numerical strength. And that's where you come in—you as individuals and as component societies.

Calling for unity against our common dangers is not a case of the boy crying "wolf!" against make-believe wolves. The wolves are all too real. Consider some of them.

Regardless of a distaste for specifics, President-Elect Carter has made it pretty clear that he will take an activist stance on health issues.

The sociologically-oriented freshmen of the last Congress will be back in force, and without fear of Presidential vetoes.

You can expect moves, as addressed in the preceding editorial, for a heavily federalized, blow-by-blow form of National Health Insurance, with the Social Security Administration as its mismanager.

You can expect a drive for an even more repressive and arbitrary Health Planning Act (which comes up for renewal in 1977)—provided this act survives the joint lawsuit of the AMA and the State of North Carolina. The drive could include an amendment mandating all states to regulate health-care rates.

You can expect a move to expand Medicare-Medicaid benefits without increasing the cost. How would this sleight of hand be achieved? By greater reliance on allied health professionals.

You can expect intensified efforts to federalize the standards for medical licensure and tilt the pharmaceutical wheel toward generic simulations.

How effectively can the AMA resist all the threats?

Well, ponder what it achieved in the last Congress. As the objective *National Journal* stated, the AMA got the fangs taken out of health-manpower legislation. It got the PSRO law amended to permit statewide PSROs and affirm the limitation of review to samples. It got the HMO Act amended, so that individual employees (including union members) can decide on their own whether to enroll in an HMO. It helped hold the line on NHI. The AMA did all of this while forging ahead on many other programs.

The AMA's achievements have been your advantages. Its future and yours are one and inseparable. Your membership in the AMA is a paving block in your only sure road to a good tomorrow.

GENERIC NAMES

We suspect that most of our readers feel the same as we do about the exclusive use of generic drug names in some scientific articles. Quite frankly, we frequently have no idea what drug or even general drug category the author is talking about. Beyond that, we don't even know where to look to find a translation of the generic terms into a drug list with which we are familiar.

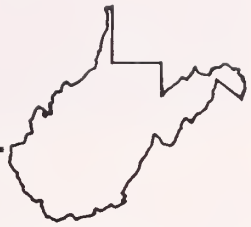
It might be perfectly obvious to those in an academic setting or within the tight confines of a specialty group when one of them goes around talking about Chlordiazepoxide. Perhaps they do talk like that all day, but it would seem a lot easier just to say *Librium* if that's what they mean. It all seems a little phoney. An affectation. Using a broad "A" when you're not even from Boston.

It might make points with the Professor or the Dean but it sure does not make points with the guys out in the trenches. They read such articles, not for intellectual exercise or to go one up on a colleague in the hospital cafeteria the next day, but for help in treating patients. They need this help and they want to get it quickly without getting bogged down with 10-syllable chemical names.

We're not going to worry about giving some drug manufacturer a free boost by naming his trade-named product. Not if it helps us to understand or get the point of an article. We are going to start insisting that our authors identify the drugs they are talking about by indicating some recognizable trade name after the fancy name.

We hope this meets with the approval of everyone.

GENERAL NEWS



Plans Completed For Mid-Winter Clinical Conference Program

Plans are complete for the Tenth Mid-Winter Clinical Conference to be held Friday afternoon through Sunday morning, January 28-30, in Charleston at the Daniel Boone Hotel.

The annual continuing education event is sponsored by the State Medical Association in conjunction with other medical groups and voluntary health agencies. The conference offers a program of diverse clinical presentations dedicated to West Virginia's practicing physicians.

The Tenth Mid-Winter Conference has been approved for 12 hours of credit in Category 1 of the American Medical Association's Physician's Recognition Award—and for 12 hours of prescribed credit by the American Academy of Family Physicians.

Friday Afternoon

The 1977 conference will begin at 2 P. M. on Friday, January 28, with opening remarks by Dr. John J. Mahood of Bluefield, President of the State Medical Association.

Presiding at the opening session, which will be a symposium on "Sports Medicine," will be Dr. Tony C. Majestro of Charleston, orthopedic surgeon, and Clinical Assistant Professor, Orthopedic Surgery, Charleston Division, West Virginia University Medical Center.

The initial three speakers and their topics will be "The Physical Exam—Basis for Exclusion from Athletics"—Herbert E. Warden, M. D., of Morgantown, Professor and Assistant Chairman of Surgery, WVU School of Medicine; "The Trainer's Role (Trainer-Teacher Concept at the High School Level")—John C. Spiker, M. Ed., of Morgantown, WVU Trainer (Coordinator of Athletic Training and Assistant Professor of Physical Education), and Certified Physical Therapist; and "Responsibilities of the Team Physician on the Playing Field and Initial Evaluation of the Injured Player"—K. Douglas Bowers, Jr., M. D., of Morgantown, orthopedic surgeon; Clinical Associate Professor, Orthopedic Surgery, WVU; and Team Physician, WVU football and basketball teams.

The following speakers will discuss briefly specific athletic injuries:

"Acute Respiratory Problems and Thoracic Injuries"—Doctor Warden; "Abdominal"—James P. Boland, M. D., of Charleston, Professor and Chairman, Department of Surgery, Charleston Division, WVU; "Head"—Arthur L. Poffenbarger, M. D., of Charleston, Chairman, Department of Neurological Medicine, Charleston Area Medical Center; and Clinical Associate Professor of Neurology, WVU and WVU Charleston Division;

"Facial"—Jacques Charbonniez, M. D., of Charleston, plastic surgeon; "Soft Tissue"—David A. Santrock, M. D., of Charleston, orthopedic surgeon; "Spine"—Doctor Majestro; "Shoulder"—Robert L. Ghiz, M. D., of Charleston, orthopedic surgeon, and Clinical Assistant Professor, Orthopedic Surgery, Charleston Division, WVU;

"Hand"—Richard H. Sibley, M. D., Charleston, orthopedic surgeon; "Knee"—Doctor Bowers; "Ankle"—Robert W. Lowe, M. D., of Huntington, orthopedic surgeon, and Team Physician, Marshall University football team; and "Major Fractures and Epiphyseal Injuries"—Carl J. Roncaglione, M. D., of Charleston, orthopedic surgeon, and Clinical Associate Professor, Orthopedic Surgery, Charleston Division, WVU.

Friday Evening

Concurrent sessions will be held at 8 P. M. Friday. The Physicians' Session, "West Virginia Medical Institute, Inc.—Year I" (a presentation and panel discussion of problem cases), will be held in the mezzanine parlors. Institute President Harry S. Weeks, Jr., M. D., of Wheeling, will preside.

The other session, a public program on "Sports Medicine," will be held in the ballroom, with Doctor Majestro presiding.

The speakers and their topics will be "Why Should Your Child Be Examined for Competitive Athletics?" —Doctor Warden; "When and Why Should Sports Injuries Be Referred to a Physician?"—Doctor Bowers;

"Midget League Football Injuries"—Doctor Lowe; and "Prevention of Sports Injuries"—Mr. Spiker and Doctor Majestro.

Saturday Morning

A symposium on "The Medical and Surgical Management of Upper Gastrointestinal Bleeding" will be held Saturday morning at 9:30, with Doctor Boland presiding.

The speakers and their topics will be "Surgical Management"—George J. Hill, M. D., of Huntington, Associate Dean for Clinical Affairs, Marshall University; and Professor and Chairman, Department of Surgery, Marshall University Medical School; "Endoscopic Diagnosis"—Thomas E. Chvasta, M. D., of Wheeling, Department of Internal Medicine,

Gastroenterology, The Wheeling Clinic; and Clinical Assistant Professor of Medicine, WVU; and "Radiographic Diagnosis"—Johnsey L. Leef, Jr., M. D., of Charleston, radiologist, and Clinical Assistant Professor of Radiology, Charleston Division, WVU.

Saturday Afternoon

"Acute Thoracic Problems" will be the title of the symposium scheduled Saturday afternoon beginning at 2 o'clock. The speakers and their topics will be "Adult Respiratory Distress"—Walter J. O'Donohue, Jr., M. D., of Richmond, Virginia, Associate Professor of Medicine, Medical College of Virginia; "The Prevention, Diagnosis and Treatment of Thrombophlebitis"—R. Thomas Linger, M. D., of Charleston, vascular surgeon; and "The Prevention, Diagnosis and Treatment of Pulmonary Embolism"—Dominic J. Gaziano, M. D., of Charleston, internist, and Clinical Associate Professor of Medicine, Charleston Division, WVU.

Presiding will be Dr. Charles E. Andrews of Morgantown, Professor of Medicine and Provost of Health Sciences, WVU Medical Center.

Saturday Evening

A cash bar (beginning at 7 o'clock) and dinner will be held Saturday evening in the ballroom, with Dr. Kenneth G. MacDonald of Charleston, Treasurer of the State Medical Association, presiding.

The speaker will be Robert W. Coon, M. D., of Huntington, Vice President for Health Services and Dean of the Medical School, Marshall University.

Sunday Morning

Dr. Thomas W. Mou of Charleston, Dean of the Charleston Division, WVU Medical Center, will preside at the Sunday morning session beginning at 9:30.

The presentations for this session will be "How People Get Well Through Psychiatry"—James R. Hodge, M. D., of Akron, Ohio, psychiatrist; and Chief of Psychiatry, Akron City Hospital; "The Health Systems Agency—What It's All About"—James T. Suter of Charleston, Executive Director, West Virginia Health Systems Agency, Inc.; and "Some Practical Aspects of Computed Tomography"—John A. Goree, M. D., of Durham, North Carolina, Professor of Radiology and Chief, Section of Neurologic Radiology, Duke University Medical Center.

Associated Meetings

A number of medical groups will be meeting in conjunction with the Tenth Mid-Winter Clinical Conference. As this issue of *The Journal* went to press, the following meetings were scheduled:

Board of Directors, West Virginia Chapter, American Academy of Family Physicians, 6 P. M. dinner meeting, Friday, January 28; West Virginia Chapter, American Society of Internal Medicine, 8 A. M. breakfast meeting, Saturday, January 29; West Virginia State Society of Allergy and Annual Meeting, West Virginia Thoracic Society, both noon luncheon meetings, Saturday, January 29; Board of Directors, West Virginia Medical Institute, Inc., 2 P. M. Saturday, January 29; Cancer Committee, West Virginia State Medical Association, 8. A. M. breakfast meeting, Sunday, January 30; and Program Committee, West Virginia State Medical Association Annual Meeting, 12:30 P. M. luncheon meeting, Sunday, January 30.

Other Conference Information

Registration will be held in the Main Lobby beginning at 1 P. M. and 7 P. M. on Friday, and at 8 A. M. on Saturday and Sunday.

Serving on the Program Committee are Drs. Ralph H. Nestmann and Joseph T. Skaggs of Charleston, Co-Chairmen; and William O. McMillan, Jr., of Charleston, and C. Carl Tully of South Charleston.

A registration fee of $20 for the entire conference, including the Saturday dinner, will be charged to all registrants except nurses, medical students, interns and residents.

All extra dinner tickets (not included in the registration fee) for the dinner session on Saturday, January 29, must be purchased by 10 A. M. on that day. Such tickets ($7.50 each) would include those for spouses and other guests—and for nurses, medical students, interns and residents.

These tickets will be available at the registration desk beginning with registration Friday afternoon.

All other registrants paying the $20 fee will receive their dinner tickets when they register at the conference.

Council Supports Doctor Weeks For AMA Council Post

The State Medical Association's Council voted at a November 21 meeting to endorse and support Dr. Harry S. Weeks, Jr., of Wheeling as a candidate for election to the American Medical Association's Council on Medical Service. An opportunity to nominate Doctor Weeks might come at the AMA's Annual Meeting in San Francisco next June.

Doctor Weeks, a Past President of the State Association, currently is one of West Virginia's two Alternate Delegates to the AMA House; and is President of the West Virginia Medical Institute, Inc.

In other action November 21, the Council:

—Reelected Dr. E. J. Van Liere of Morgantown to a new seven-year term on the Publication Committee, to begin January 1; and selected Dr. L. Walter Fix of Martinsburg to fill the unexpired term, to run through 1981, of the late Dr. George F. Evans of Clarksburg.

—Approved a 1977 Association operating budget, exclusive of medical scholarship requirements, of $253,575.

—Elected as an honorary member Dr. Arthur E. McClue of Dunbar after similar action by the Kanawha Medical Society.

—Heard a general review of health maintenance organization, professional liability insurance and certificate of need proposals under development for possible consideration by the 1977 session of the State Legislature to begin in January.

—Heard a status report on U. S. District Court anti-trust litigation instituted by a group of Huntington chiropractors against six health insurance plans and the Medical Association; and on action brought in Cabell Circuit Court to block implementation of 1976 state legislation redefining optometry and authorizing optometrists in West Virginia to use diagnostic and therapeutic drugs.

—Approved technical amendments to the Association's Employe Benefit Plan to conform to requirements of the 1974 Federal Pension Reform Act.

—Took note of such issues as the AMA position on National Health Insurance proposals, and an AMA Board proposal for direct billing for membership dues, to come before the AMA House during the December 4-8 Clinical Convention in Philadelphia. The Council voted to send the Association's Delegates and Alternates to the convention uninstructed.

The Council was advised of questions raised by representatives of the Logan County Medical Society and the West Virginia Chapter of the American Academy of Family Physicians about changes proposed by Aetna Life & Casualty in the Association's professional liability insurance program.

The questions generally centered about a reclassification of physicians for premium determination purposes; and removal from the Aetna policies for 1977 of language requiring physicians' consent prior to settlement of claims.

Council was advised by the Chairman, Dr. Jack Leckie of Huntington, that these and other questions would be reviewed during a December 6 meeting in Philadelphia of representatives of Aetna and the eight states, including West Virginia, in which that company now operates liability insurance programs for medical associations.

Fairmont Clinic CME Program Surveyed By Association

The continuing medical education program of the Fairmont Clinic was surveyed by the State Medical Association, through its Committee on Medical Education and Hospitals, on November 17.

The members of the survey team were Drs. Hu C. Myers of Philippi, Chairman, and Creel S. Cornwell, Jr., of Clarksburg. Results of the survey will be announced following action by the Committee on Medical Education and Hospitals on the survey team's recommendations.

The CME programs of six hospitals and three specialty societies have been approved since the voluntary accreditation program began in 1973. They are: Beckley Appalachian Regional Hospital; West Virginia Academy of Ophthalmology and Otolaryngology; West Virginia Chapter, American College of Surgeons; St. Mary's Hospital, Huntington; Charleston Area Medical Center; West Virginia Obstetrical and Gynecological Society; Broaddus Hospital—Myers Clinic, Philippi; the combined program of the Ohio Valley Medical Center and Wheeling Hospital, in Wheeling; and the Veterans Administration Center, Martinsburg.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. N. LeRoy Lapp, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Jan. 27	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Feb. 24	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Mar. 2-4	Selected Topics in Internal Medicine Cosponsored by American College of Physicians	Morgantown
Mar. 24	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Mar. 25	Fourth Annual Newborn Day	Charleston
Mar. 25, 26	Cancer Teaching Day—Human Cervical Cancer	Morgantown

Physicians Asked To Advise Heart Patients Of Costs

The American Heart Association's West Virginia Affiliate has expressed concern about medical costs it reports state residents often encounter—without resources to pay—when referred to institutions elsewhere for cardiac surgery.

"Physicians making referrals out of state . . . should first take into consideration the source of funds to pay for the medical services after com-

pletion of the (corrective cardiac) surgery," the heart organization has suggested.

A letter from the West Virginia Affiliate was reviewed by the Medical Association's Executive Committee at a November 20 meeting in Charleston; and the Committee directed that the correspondence be called to the attention of the Association's membership through a *Medical Journal* article.

Executive Director Charles E. Sikorski of the Heart Association Affiliate offered one "case in point." He said he was advised by a 62-year-old woman residing in a southern West Virginia county that her husband—also 62 and just beginning to receive Social Security benefits—was referred to an out-of-state hospital.

"Open heart surgery was performed which, unfortunately, was unsuccessful," Sikorski wrote. "Upon returning home, the widow was given a bill from the . . . hospital of $24,000 and a bill of $1,600 from one of the surgeons. What compounds the situation is that it is very difficult to talk about paying for medical expenses when the individual on which the surgery has been performed is now deceased."

Sikorski explained that in this instance the widow has no means to pay the bills, and his letter continued as follows:

"This is just one case that has been brought to my attention over the last four years. I would say that at least one a month is of the same nature in which physicians from West Virginia are referring residents into Ohio and other places for surgery. Unfortunately, either the counselors, the admitting officers, or the physicians where the surgery is performed are not taking into consideration how these funds can be obtained or what services can be set up to pay for these medical expenses once they have been incurred.

"Therefore, I strongly feel and would like to recommend that it be brought to the attention of the State Medical Association that the family physician, upon making the referral . . . also insure that proper steps have been taken to provide finances to cover the surgery to be performed."

ACP-WVU Internal Medicine Course In Morgantown, March 2-4

The American College of Physicians and the West Virginia University Medical Center will co-sponsor a three-day continuing education course, "Selected Topics In Internal Medicine," March 2-4 at the Lakeview Country Club in Morgantown.

Dr. Edmund B. Flink, WVU Professor of Medicine, will be the course director.

Credit of 20 and three-fourths hours in Category 1 of the American Medical Association's Physician's Recognition Award is available for this continuing medical education activity.

The course will consist of three days of review of what is new in internal medicine. Special topics in medicine and its specialties will be presented in lectures, panels, demonstrations, illustrative case analyses and workbook exercises. Related topics will be presented in blocks. Participation in problem situations is planned. Emphasis will be placed on newer diagnostic information.

The faculty will include faculty members from the WVU Department of Medicine and a guest faculty of six. The latter will be Drs. Leighton E. Cluff of Princeton, New Jersey, Vice President, Robert Wood Johnson Foundation; Robert Hamil-

West Virginia University School of Medicine's Office of Continuing Education, and colleagues, former students and residents of Dr. Edmund B. Flink, Professor of Medicine, recently sponsored a scientific seminar in his honor at WMU Medical Center. Enjoying an infrequent reunion during the event were (from left) School of Medicine Dean John E. Jones, M. D.; Dr. Linda D. Lewis of New York's Neurological Institute, an alumna of the Class of '65 and a program speaker; Doctor Flink; and other speakers—Dr. German Lizarralde, Chief of the Medical Service at the Medical Center's Charleston Division and former resident and fellow under Doctor Flink; and Dr. Erskine M. Caperton, Jr., Chief of Rheumatology at the University of Minnesota and an alumnus of the Class of '65. The all-day tribute also included a banquet and the unveiling of a portrait of Doctor Flink, Chairman of the Department of Medicine from 1960 until last June, when he resigned to devote full time to teaching, patient-care and research. More than 200 physicians have had all or a significant part of their residency training in internal medicine under his tutelage.

ton, Hershey, Pennsylvania, Associate Professor of Medicine, Division of Hematology, Hershey Medical Center, Pennsylvania State University; Thomas Medsger, Jr., Pittsburgh, Assistant Professor of Medicine, Division of Rheumatology, University of Pittsburgh.

Victor E. Pollak, Cincinnati, Professor of Medicine and Director of Division of Nephrology, University of Cincinnati Medical Center; Phillip Schein, Washington, D. C., Associate Professor of Medicine, Georgetown University Medical School; and Chairman of the Division of Medical Oncology, Vincent T. Lombardi Cancer Center; and Jack Vennes, Minneapolis, Minnesota, Professor of Medicine, Division of Gastroenterology, University of Minnesota Medical School.

The course is planned for a minimum number of 77 registrants and a maximum of 150. The fee for ACP members, fellows, residents and research fellows is $100; non-members, $150, and ACP associates, $50. An additional charge of $10 per person will be made to cover the cost of printing syllabi. This should be added to the appropriate fee when submitting registrations.

All registrations and requests for information should be directed to: Registrar, American College of Physicians, 4200 Pine Street, Philadelphia, Pennsylvania 19104.

MCV Schedules CME Courses In February And April

The 48th annual McGuire Lecture Series, a postgraduate course entitled "Immunology Update," will be held at the Medical College of Virginia, in Richmond, February 12-13.

The featured guest speaker will be Richard Hong, M. D., Professor of Pediatrics, University of Wisconsin School of Medicine.

Topics will include an overview of basic immunology, a discussion of the clinical manifestations and management of immunological disorders, presentations on how to do office workups of immunological problems, and discussions on the use of immunological diagnostic techniques.

This continuing medical education offering meets the criteria for 14 hours of credit in Category 1 for the Physician's Recognition Award of the American Medical Association—and for 14 prescribed hours by the American Academy of Family Physicians.

The Medical College also is announcing the 30th annual Stoneburner Lecture Series, "Safety in Anesthesia," to be held April 15-16. This course is approved for 13 hours of credit in Category 1 of the Physician's Recognition Award—and for 13 prescribed hours by the AAFP.

The Program Chairman will be C. Paul Boyan, M. D., Professor and Chairman, Department of Anesthesiology, Medical College of Virginia.

For additional information contact: Department of Continuing Education, School of Medicine, Medical College of Virginia, Box 91, Richmond, Virginia (phone (804) 770-8207).

Aetna Outlines New Peer Review Procedure

Aetna Life & Casualty has outlined a new peer review procedure it is willing to follow in connection with elimination of the "consent to settle" provision from 1977 policies it writes under the State Medical Association's Professional Liability Insurance Program.

West Virginia physicians are aware that the Aetna program change eliminates language requiring physicians' consent to settlement of claims, but Aetna has emphasized that the change is applicable only to incidents occurring after the January 1 policy renewal date.

(A discussion of another change in the Aetna program—the reclassification of physicians for premium purposes, and some modifications now being made in that plan—can be found in the Third-Party News, Views and Programs in this issue of *The Journal.*)

"As allegations of malpractice are accusations directed at a physician's competence and reputation," Aetna has explained, "a procedure has been established which provides for peer review when the involved doctor objects to a proposed settlement."

The Aetna statement continues:

"The review mechanism is as follows:

"1. During the course of the claim investigation, the doctor will have the opportunity to discuss the specifics of the allegations with Aetna's claim adjustors. If the doctor objects to settlement and feels strongly that his case should be defended, he should write to the West Virginia State Medical Association stating his objections, along with an outline of his reasons.

"2. The Association will notify the Account Supervisor and the Ad Hoc Professional Liability Committee, who will review the case. If disposition cannot be resolved and the doctor continues to object to settlement, the Account Supervisor will arrange for review by a Claim Defense Panel.

"3. The decision of the panel will be transmitted as a recommendation to Aetna through the Account Supervisor.

"4. In . . . analysis of the case, Aetna will give consideration to the recommendation of the defense panel; however, the final decision as to defend/settle will rest with Aetna.

"5. When a case has been settled, Aetna will notify the physician in writing.

"While the results of such a review have never been binding upon Aetna, they are of value to its claim personnel in the disposition of malpractice claims. . . ."

32 Cases Of Extrapulmonary TB Reported In State

Editor's Note: Following are excerpts from a recent issue of "State of the State's Health," by Dr. N. H. Dyer, State Health Director.

Tuberculosis is a communicable disease caused by a germ, the tubercle bacillus. Most commonly it attacks the lungs. Yet it may be found in other parts of the body. In West Virginia, 32 of the 263 verified cases of tuberculosis reported last year were extrapulmonary.

Almost any part of the body may become tuberculous, but some parts—the bones and joints, the lymphatic, reproductive, urinary and digestive systems, as well as the lungs—are more susceptible to the disease than others. But today, when an infection is found, . . . treatment with drugs can prevent disease.

Tuberculosis germs are breathed in with air and so go first to the lungs. They may move to other organs in the body in either of two ways: occasionally, sputum containing large numbers of tuberculosis germs may be coughed up from the lungs into the throat and mouth. Some of these germs may be swallowed and find their way to the intestines or other organs of the body. The most common route that tuberculosis germs travel, particularly among infants, children, and others recently infected, is through the blood and lymph systems. Most of these germs are destroyed by fighter-cells, but some remain alive. These may cause immediate trouble or they may be locked in by scar tissue. While locked-in germs usually remain under control, in a few cases—if preventive therapy has been neglected—they may break out, even years later, multiply and cause disease.

Miliary Tuberculosis

If large numbers of the tuberculosis germs escape suddenly into the blood stream, the disease develops rapidly and affects many organs. This condition is known as generalized miliary tuberculosis. Drug treatment should be started promptly, for the condition is serious.

When tuberculosis occurs, it is necessary to find it early and start treatment promptly. In all tuberculosis conditions, early treatment is most important, not only to maintain the general health of the body, but to prevent crippling, deformity or possible destruction of vital organs.

Preventive drug treatment sometimes has side effects. Someone over 35 may not receive treatment if his doctor believes the risk of side effects is too great. Anyone receiving such treatment should be checked regularly and should report to his doctor anything that bothers him.

Medical Meetings

Jan. 17-21—Southeastern Breast Oncology Conference, Miami.

Jan. 20-22—Neurosurgical Society of the Virginias, Hot Springs, Va.

Jan. 28-30—Tenth Mid-Winter Clinical Conference, Charleston.

Jan. 28-30—AMA Congress on Medical Education, Chicago.

Feb. 3-8—Am. Academy of Orthopaedic Surgeons, Las Vegas.

Feb. 6-9—Am. Society of Abdominal Surgeons, New Orleans.

Feb. 9-13—Am. College of Nuclear Physicians, New Orleans.

Feb. 28-March 3—Am. College of Cardiology, Philadelphia.

March 24-27—ASIM, Kansas, Mo.

March 26-31—Am. Academy of Allergy, New York City.

March 28-31—ACS, Los Angeles.

April 3-9—Am. Assn. of Immunologists, Chicago.

April 13-16—Am. Gynecological Society, Litchfield Park, Ariz.

April 17-21—Am. Academy of Pediatrics, New Orleans.

April 17-22—Am. College of Radiology, Houston.

April 18-21—ACP, Dallas.

April 20-22—Medical & Chirurgical Faculty of Md., Cockeysville, Md.

April 22-23—Am. Heart Assn., Williamsburg, Va.

April 22-24—W. Va. Chapter, AAFP, Morgantown.

April 24-27—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

April 25-30—Am. Academy of Neurology, Atlanta.

April 29-May 1—Am. Trauma Society, Chicago.

May 4-7—W. Va. Chapter, ACS, White Sulphur Springs.

May 8-9—Am. Otological Society, Boston.

May 15-18—Am. Thoracic Society, San Francisco.

May 15-19—Ohio State Medical Assn., Columbus.

May 25-28—Am. College of Sports Medicine, Chicago.

May 30-June 1—Am. Ophthalmological Society, Hot Springs, Va.

June 5-7—Am. Diabetes Assn., St. Louis.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Oct. 10-13—AAFP, Las Vegas.

Nov. 6-9—Southern Medical Assn., Dallas.

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Minimal Cancer Of The Breast: Diagnosis By Mammography

Joseph R. Asaro, M. D.

"Minimal cancer of the breast" is a new, more accurate term to describe the in situ *or very small invasive cancers of the breast. Mammography, with its technical improvements, has demonstrated to be a capable, and many times the only, way to detect these lesions which are now seen more frequently because women are seen earlier in the course of their disease. There is a tendency toward a selective, conservative treatment of these curable lesions.*

The Author

- **Joseph R. Asaro, M. D., formerly from the Department of Radiology, West Virginia University School of Medicine, Morgantown; now at Ellis Hospital, Schenectady, New York.**

The term, "minimal cancer of the breast," was introduced recently to substitute for the more widely used term of "early cancer of the breast," which was used to diagnose lesions confined to the breast and small cancers of undefined size. The latter term, besides being vague, was also inaccurate because we do not know with certainty the natural history of cancer of the breast and, in particular, how long a carcinoma *in situ* remains dormant before becoming infiltrating. Therefore, we cannot establish how "early" the lesion is we are dealing with.

Another vague term previously used is that of "occult cancer of the breast," which meant only that the lesion was missed by the previous observer; obviously, the more sensitive the method of detection the less occult a particular lesion becomes. "Clinically occult cancer" also meant that the lesion was missed by the patient by simple physical examination. The purpose of this paper is to define and promote the use of this relatively new term and to present a few illustrative cases which fall into the category of minimal breast cancer.

Case One

A 39-year-old female with a history of carcinoma of the cervix *in situ* had mammograms because of "lumpy" breasts. No dominant mass was present; however, the mammography revealed large breasts with diffuse fibrocystic changes.

A small, poorly defined area of increased density of about five millimeters in diameter was

Figure 1 (Case One). Area of increased density (arrow) in lower inner quadrant of right breast.

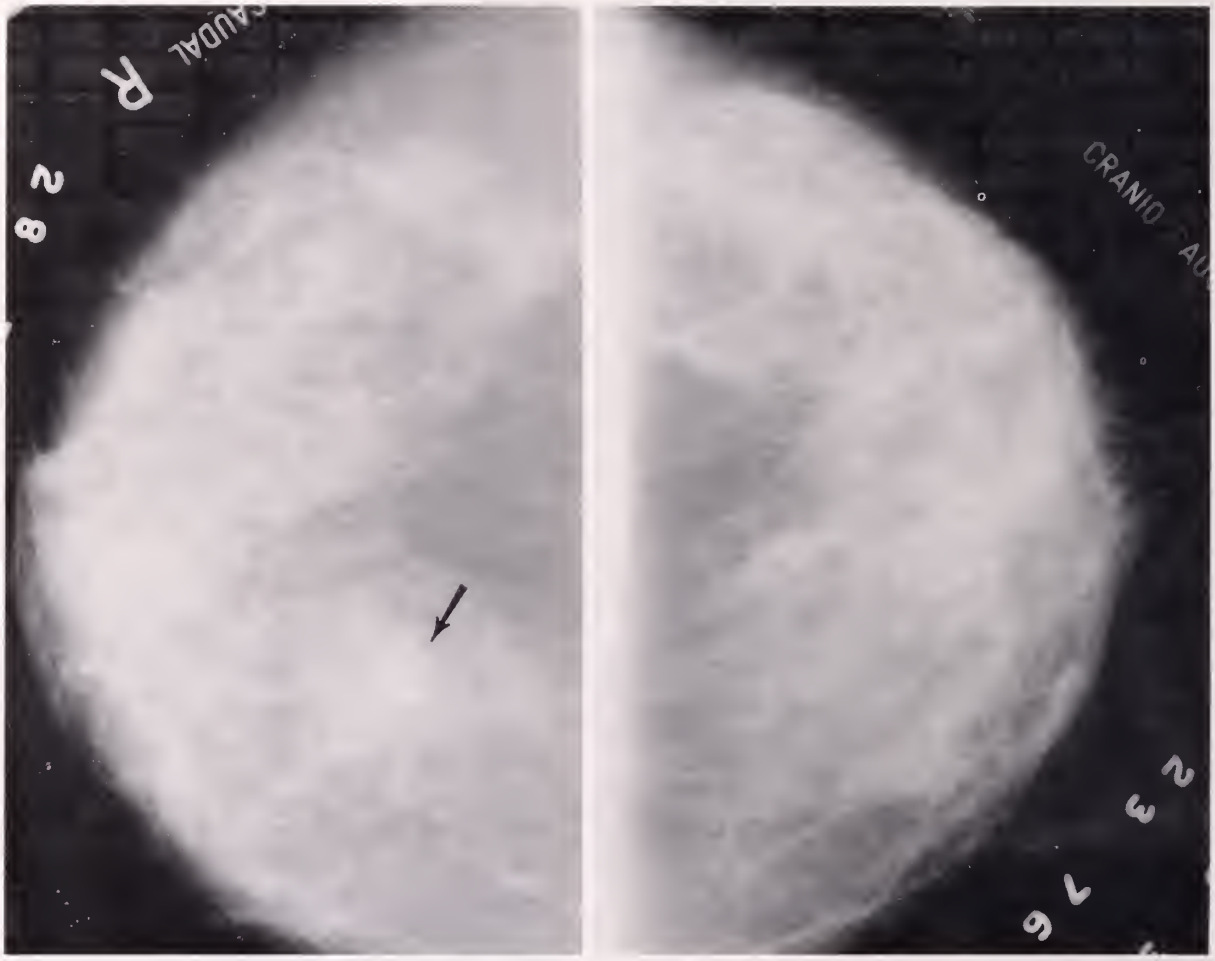

Figure 2 (Case One). Craniocaudal projections of left and right breast: arrow points to the area of increased density in the right breast. No corresponding density is present in the left breast.

seen in the inner lower quadrant of the right breast. The lesion caused localized distortion of the breast architecture and presented clustered calcifications, but no well-defined mass was present. Biopsy, following localization of the lesion with needle technique, showed fibrosing adenosis, varying degrees of ductal epithelial hyperplasia and a focus of lobular carcinoma. The patient underwent a right, simple, mastectomy.

Figure 3 (Case One). Specimen radiography: distortion of breast architecture and calcifications demonstrated, but no mass is present.

Case Two

A 51-year-old woman presented with a long history of fibrocystic disease and multiple cyst aspirations. Mammography showed moderate fibrocystic changes and a small area with clustered calcifications in the upper axillary quadrant of the right breast without a definite mass. Biopsy of the area showed diffuse cystic disease with areas of intraductal epithelial hyperplasia with atypicality, considered to represent malignancy or at least a premalignant lesion. Right total mastectomy and mirror image biopsy of the left breast were performed. The left breast biopsy showed again focal lobular and intraductal hyperplasia and a focus of lobular carcinoma *in situ*. A simple mastectomy of the left breast was therefore performed.

Discussion

Before mammography became routine in the evaluation of breast disease, 95 per cent of breast cancers were detected by the patients themselves, and at surgery the majority of the cases (50 to 60 per cent) were found to have regional axillary metastases. The widespread use of mammography since the early 1960's has produced a considerable reduction in the frequency of axillary metastases. Furthermore, in the cases detected only by mammography, the incidence of axillary metastases is very low. Rogers and Powell[2] report that 95 per cent of this group of patients had no axillary metastases. Mammography has demonstrated time and time again that it is capable of detecting lesions which cannot be palpated even by the most experienced hands. The radiographic findings consist of very small lesions of the order of a few millimeters and less than one centimeter, which present the typical "tumor calcifications" and which, because of infiltration of the surrounding breast tissue, cause retraction. Improvements made in mammography techniques and equipment in the last five years have permitted further refinements in the radiologic diagnosis of breast cancer and have led to frequent discovery of minimal breast cancers.

Figure 1 (Case Two). Medio-lat. view of right breast: the arrow points to the area with clustered calcifications.

Figure 2 (Case Two). Specimen radiography: no mass demonstrated, area with calcifications included in the specimen.

Minimal breast cancers are those lesions which fall in the following categories: (1) carcinomas *in situ*, either intraductal or intralobular; (2) small invasive carcinomas, the size of this lesion being one centimeter or less if located in the lateral half of the breast and 0.5 centimeter or less if located in the medial aspect of the breast; and (3) invasive cancers of favorable histologic type (medullary, papillary, mucinous, etc.).

The roentgenographic criteria which are used to diagnose these lesions are: (a) *small mass* which presents the characteristic appearance of a malignant lesion, even though very small in size; (b) *localized distortion* of the breast architecture (the retraction of the surrounding trabeculae caused by the lesion produces a stellate arrangement of these trabeculae); and (c) *clustered calcifications*, this being the most frequent radiographic finding of minimal breast cancer. The calcifications may be present alone or associated with a small mass. The calcifications in consideration are not, of course, the benign ductal calcifications or vascular calcifications or the calcifications of old fibroadenomas, but the small punctate or irregular calcifications commonly seen in malignancy. The same type of calcifications can be seen in benign conditions such as sclerosing, adenosis, ductal papillomatosis, apocrine metaplasia and ductal hyperplasia; but as reported by Rogers and Powell,[2] the incidence of malignancy increases with the increase of the

number of calcifications. They found an 82 per cent incidence of malignancy if there were more than 15 calcifications in less than one square centimeter. Calcifications also provide a convenient marker for tracing occult lesions; that is, they are very helpful in localizing the lesion on specimen radiography.

It is well to emphasize that these lesions usually produce no signs or symptoms and, if symptoms are present, they are not related to the lesion so that the finding of minimal cancer of the breast, especially for the *in situ* lesions, must be considered a fortuitus occurrence in patients having mammography for other reasons. It is also very important to make sure that the suspicious area, demonstrated on the mammogram, is the one that is actually removed. For this purpose the needle localization technique or the methylene blue-water soluble contrast technique should be used prior to the biopsy and a specimen radiograph should be done before the specimen is delivered to pathology.

The treatment of these lesions also presents formidable problems that, up to now, have not been totally resolved. Mainly, the problem is the following: how extensive a procedure should the surgeon perform on breasts with minimal cancer, especially considering the fact that the great majority of these patients will have metastasis-free lymph nodes? The type of surgery performed goes from the modified radical mastectomy to simple mastectomy, to subcutaneous mastectomy, to partial mastectomy or quadrant resection.

Even though a detailed discussion of this controversial subject is beyond the scope of this paper, it suffices to say that, at present, the type of operation used most frequently for these potentially curable lesions is total or simple mastectomy. At the same time, there is a trend toward a selective conservative type of treatment like subcutaneous mastectomy and partial mastectomy.

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A Fatal Case Of Idiopathic Omental Infarction

Robert D. Patchell, M. D.

Infarction of the greater omentum without a demonstrable cause is a rare and puzzling condition. As there are no distinguishing clinical features, rarely is a correct preoperative diagnosis made. Although initial symptomatology may be relatively mild, persistent or increasing abdominal pain usually leads to laparotomy, resection of the infarcted tissue and uneventful recovery. In the case to be described, however, fatal sepsis developed.

The Author

- **Robert D. Patchell, M. D., Charleston, West Virginia.**

Case History

On July 21, 1966, a 34-year-old nultigravida black woman was admitted to hospital in a semi-comatose state. Her relatives stated that the patient had suffered abdominal pain, nausea and mild diarrhea for the past four days. For 18 years she had been addicted to heroin, presently using three "bags" daily intravenously. In 1962, she had been hospitalized for conservative management of chronic pelvic inflammatory disease.

The patient was emaciated and moderately dehydrated. She could be roused by painful stimuli but speech was incoherent. The pulse was 120 and thready. The blood pressure was 80/00 mm. Hg. and difficult to determine. The respiratory rate was 20. Temperature was 101°F. per rectum. Venipuncture sites were free of obvious infection. Abnormal physical findings were limited to the abdomen and pelvis. Moderate abdominal distension and tympany were noted. The patient responded to abdominal palpation by groaning and pushing away the examining hand. No masses were noted. Pelvic examination revealed bilateral adnexal thickening. The uterus was of normal size. No abnormal cervical discharge was noted.

Shortly after admission the blood pressure fell to 55/00 mm. Hg. Nasal oxygen, metaraminol IV drip, and intravenous Ringer's lactate were commenced. Hydrocortisone 500 mg. was administered IV. Antimicrobial therapy consisted of chloramphenicol two grams and 20 million units sodium penicillin IV. Methadone 10 mg. IM was administered. Serum electrolytes were within normal limits. Hematocrit 38 per cent; WBC 19,000 cu. mm. The BUN was 65 mg./100 ml.; pCo_2 15 m Eq; catheterization revealed 50 ml. of urine. The urinalysis was negative except for a trace of albumen. No pus or tubular epithelial cells were noted.

A diagnosis of septic shock secondary to intra-abdominal sepsis was made and urgent laparotomy performed under lidocaine field-block. Approximately 800 ml. of musty-smelling, thin turbid fluid was aspirated from the peritoneal cavity. The subcolonic greater omentum was dark green and necrotic except for a regular one-centimater strip adjacent to its attachment to the transverse colon. The distal edge was adherent to the utuerus and adnexa across the entire pelvis. Bilateral small hydrosalpinges were noted. The necrotic omentum was resected and bilateral salpingo-oophorectomy performed. The areas of the large and small bowel apposed to the necrotic omentum were covered with green fibrinous exudate. No additional intraperitoneal abnormalities were noted. Penrose drains were placed through both lower quadrants. The abdomen was closed with steel sutures. At the completion of surgery tracheostomy was performed and mechanical respiratory assistance initiated. Methadone 8 mg. was administered IM 6 hourly. Gradual improvement occurred during the first 48 hours following surgery. She remained semi-conscious with the blood pressure maintained at 100/70 mm. Hg. without the use of pressor agents. Urine output was adequate. Hydrocortisone 500 mg. IV was continued every six hours. Chloramphenicol six gm. and sodium penicillin 40 million units IV were continued daily. Gradual discontinuance of respiratory support was well tolerated. On the eighth postoperative day she had a grand mal seizure which was quickly controlled with IV sodium amobarbitol. She became less responsive; the blood pressure fell to 60/40 mm. Hg. and the pulse became weak at 140. Intensive supportive therapy was unsuccessful, with death occurring on the tenth postoperative day.

The resected omentum showed extensive infarction with a marked acute inflammatory reaction at the line of resection. The ovaries and tubes showed surface inflammation only. The peritoneal fluid grew E. coli, sensitive to chloramphenicol but insensitive to penicillin. Autopsy revealed acute peritonitis with no apparent cause.

Mild tracheobronchitis was noted. No intracranial lesion was detected. The kidneys and adrenal glands showed no abnormalities.

Comments

Torsion was noted in most reported cases of infarction of the otherwise normal omentum.[1,2] Nontorsional infarction was first reported by Bush[3] in 1896. Usually only a part of the subcolonic greater omentum is involved, leading to the classification as "primary idiopathic segmental infarction."[4] The cause or causes of nontorsional omental infarction are obscure. Both torsional and nontorsional cases are frequently associated with right-side predominance, segmental involvement, excessive fat accumulation, and tongue-like omental configurations. This suggests a common etiology in at least some instances. Although absent at the time of laparatomy, possibly an original twisting reverts as congestion and edema progresses. The greater omentum is vascularized by vessels cephalad to the transverse colon. Its attachments to the transverse colon and mesocolon are avascular. Considering the anatomy, it is strange that the supracolonic part (gastrocolic ligament) is only rarely involved. Possibly the dynamics of the transverse colon play a causative role.

The case described is unusual in the wide extent of the omental involvement. Only a one-centimeter band of the subcolonic port was viable. The broad attachment to the pelvic structures precludes the possibility of an initiating torsion. Although delay in treatment is not infrequent, a fatal outcome is very rare. It is likely that the source of intra-abdominal infection was related to the intravenous use of heroin. The infection of a large amount of involved omentum probably led to an overwhelming endotoxinemia.

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A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

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Cholestyramine Therapy In Postgastrectomy Alkaline Bile Gastritis

Rafael Antonio Ortiz, M. D.; and Esther Torres, M. D.

The purpose of this communication is to report three cases of postoperative bile gastritis seen at the Veterans Administration Hospital, San Juan, Puerto Rico, in which cholestyramine (resin-building bile salt) was used with successful result.

The Authors

- **Rafael Antonio Ortiz, M. D.; and Esther Torres, M. D., both from the Department of Medicine, Section of Gastroenterology, Veterans Administration Hospital, San Juan, Puerto Rico; and the University of Puerto Rico School of Medicine.**

Bile reflux into the stomach is a well-known occurrence in postgastrectomy patients.[1,2] The constant reflux of bile into the stomach in a postoperative, susceptible person may damage the gastric mucosa and subsequently lead to severe gastritis.

Epigastric pain, anorexia, bilious vomiting, and weight-loss are the commonest symptoms. When these symptoms persist, and are refractory to medical therapy, patients must usually undergo reconstructive surgery.

Case One

This patient was a 49-year-old physician who was admitted because of epigastric discomfort, bilious vomiting, and anemia one year after gastric surgery (antrectomy plus vagotomy). Symptoms were not relieved by antacids. X-rays of the upper gastrointestinal tract, gallbladder, as well as barium enema, were negative. Gastric analysis, both basal and after stimulation with histamine, were compatible with a complete vagotomy. Panendoscopy showed severe gastritis around the stoma and extending to the rest of the stomach. Bile plugs and persistent reflux were present. The patient was started on cholestyramine in dose of four grams every four hours during the day, and iron therapy. During six months of continuous therapy, the patient rapidly gained weight, the anemia improved and he became free of symptoms. No complications of cholestyramine therapy were observed during this period.

With this patient, the symptoms appeared one year after surgery and were unrelieved by antacid. Gallbladder stones and acute gastric ulcer were ruled out by a normal gallbladder series and a normal gastrointestinal series. The diagnosis of bile gastritis was further proved by endoscopy.

Case Two

A 51-year-old male was admitted with symptoms of loss of appetite, bilious vomiting, and persistent epigastric pain. Symptoms were partially relieved by antacid and diet. He had had a gastric resection and vagotomy four years earlier, but the symptoms had been present for the past two years. X-ray of the upper gastrointestinal tract and gallbladder were normal. Gastric analysis showed findings compatible with a complete vagotomy. Panendoscopy showed severe gastritis, bile plugs, and reflux of bile from the afferent loop. The area around the anastomosis looked very hyperemic with prominent beefy folds. During hospitalization, he was placed on cholestyramine, four grams every four hours during the day. He improved, was discharged and, two months later, was free of symptoms.

In this patient, the triad of persistent pains, bilious vomiting and normal x-ray with a history of previous gastric surgery, made the diagnosis of bile gastritis highly suspicious. It was further documented by endoscopy.

Case Three

A 28-year-old male was admitted because of postprandial epigastric fullness and pain. Two years prior to this admission, the patient had had gastric surgery (pyloroplasty plus vagotomy). He also had undergone a cholecystectomy one year previously because of the symptoms mentioned above.

X-ray of the upper gastrointectinal tract and barium enema were normal. Gastric analysis showed findings compatible with a complete vagotomy. Panendoscopy showed a severe esophagitis and gastritis, and tremendous reflux of bile was seen in both the gastric stoma and the esophagogastric junction. Therapy consisted of cholestyramine, four grams every four hours. During four months of observation, the patient was asymptomatic.

This patient represents another example of bile reflux gastritis. He also had esophagitis, probably

induced by bile since he did not have acid in the stomach. He underwent cholecystectomy because of persistent symptoms which eventually were relieved by four grams of cholestyramine every four hours.

Discussion

Postoperative alkaline gastritis appears to be a well defined entity. Various symptoms occur, but epigastric pain, bilious vomiting, and loss of weight are most commonly seen. The diagnosis is confirmed by endoscopic examination which reveals inflamed, edematous, friable mucosa with areas of superficial erosion[3, 4] and on occasion, bile plugs adherent to the mucosa. Bile reflux is usually seen during the procedure.

Clinically, bile gastritis mimics the chronic afferent loop syndrome, but it can be differentiated from the latter by the fact that the pain is continuous and is not relieved by vomiting.

The effect of bile salt on the gastric mucosa has been well documented. Davenport[5] demonstrated that detergents such as bile salt cause disruption of the canine gastric mucosal barrier with a resultant efflux (back diffusion) of (H) ions from the lumen and influx of Na and K into a lumen of denervated gastric pouches. This increase of (H) also has been shown by Ivey,[6] after installations of five millimoles Taurine conjugated bile salt. Cholestyramine is a bile acid sequestering agent which partially interrupts bile acid enterohepatic circulation by its action of binding bile salt.[7] Because of its insolubility in water and high molecular weight, it is possible that this agent is not absorbed from the gut.[8] Experimentally, it has been shown to prevent ulcer formation in the stomachs of rats and dogs by blocking the barrier-breaking action of bile salt.[9, 10]

Although its role is not well defined in the treatment of alkaline gastritis, the clinical improvement of our three patients suggests that this agent may be beneficial in treating patients with postoperative alkaline gastritis, particularly in the patients who are poor risks for any reconstructive surgery.

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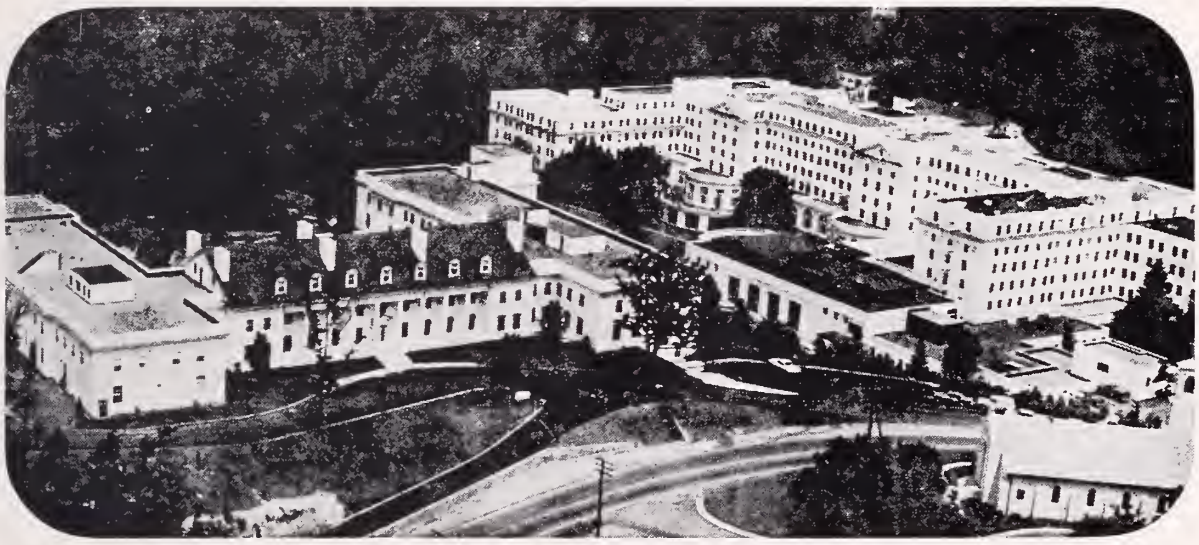

The Greenbrier

AUGUST 24-27, 1977

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The President's Page

CONSTRUCT A COMMUNICATION LINE

Guest Author
Mrs. J. L. Mangus, President
Auxiliary to the
West Virginia State Medical Association

Communication is the focus this year for the Auxiliary to the West Virginia State Medical Association. We Auxiliary members are a prime communication resource by our direct contact with the community when providing medical educational programs, health scholarship loans, assisting with immunization efforts and many other activities. By invitation, the Auxiliary President and President Elect attend your State Council meetings, thus providing a new learning experience for us. We hope to better understand your objectives and therefore direct the Auxiliary goals in harmony with the State Medical Association.

Auxiliary communication in legislation is continuing. At present we are especially interested in LEGSLINE. This is a network of alert teams established in each of the 50 states to communicate by letter or telegram with our representatives in Washington. A day at the State Capitol is planned for the Auxiliary members in the spring to familiarize them with the process of State government and how we can work through State government concerning legislative issues.

Men married to physicians are eligible to join the Auxiliary. National, state, and county auxiliaries have removed the word "Woman's" from their name and seal. We now have active male and female members. We also are inviting students' and residents' spouses to join as affiliate members or to attend our meetings as guests.

Physicians, we need you as our supporters. Encourage your spouse to join us. By uniting we can further the achievement of the West Virginia State Medical Association activities.

Jane Mangus

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

MIGRAINE AND HYPERTENSION

It has been recognized for many years that persons afflicted with migraine often develop hypertension. It has been mentioned[6] that Janeway,[1] in 1913, probably was the first to call attention to the occurrence of migraine during early life in persons who later had hypertension. Since that time a number of workers have reported that hypertension is often associated with migraine. Gardner *et al*,[2] in 1940, reported that the frequency of migraine in 100 hypertensive patients was five times that in 100 controls. Atkins,[3] in 1955, found that six of 24 migraine patients had hypertension compared with only two of 26 controls. In 1959, Walker,[4] the English clinician, emphasized the relationship of migraine with hypertension. In his study, both mean systolic and diastolic pressures in migraine patients were appreciably higher than those in controls. He observed further that the prevalence of migraine increased with increasing blood pressure in 187 patients over 50 years of age. Del Bianco *et al*,[5] in 1967, reported that after the age of 40 years migraine patients had significantly higher mean systolic pressure than did controls.

Thus, it seems quite well established that migraine patients are likely to develop hypertension. As a consequence, physicians should bear this in mind and advise their migraine patients to have their blood pressure determined periodically. This is important since Leviton *et al*[6] have pointed out that migraine patients are more likely to have a heart attack, especially before the age of 70 years, than persons without migraine. These authors mention, interestingly enough, that persons with migraine are not at increased risk of stroke. While this latter fact is fortunate for people with migraine, the danger of an early heart attack, nevertheless, should be borne in mind. While probably not much can be done to eliminate attacks of migraine, much can be done to control the associated hypertension. There are several excellent anti-hypertensive preparations available which are highly effective and, if the patient takes his medication regularly, the blood pressure, as a rule, can be adequately controlled.

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EFFORTS AGAINST FRAUD IGNORED, CIRCUMVENTED

Our profession today is being smeared by a brush that has gone haywire.

We have called and worked for crackdowns on Medicaid-Medicare fraud and other abuses of our ethical standards — yet we are being tainted with "guilt by association" simply because the abusers include doctors.

While political hay is being made out of the abuses, our efforts against them are mostly ignored and even circumvented by politicians. Judicial roadblocks also have been placed in our way.

The House of Delegates of the American Medical Association, at its convention last June, urged government agencies to prosecute Medicaid-Medicare defrauders with due speed and offered the Association's cooperation.

HEW has set up a special fraud office, and Congress last autumn provided for an Inspector General of all HEW programs, particularly Medicaid. But how effective can government be, aside from finger-pointing at the Medicaid-provider incomes and televising its fists?

Well, Senator Sam Nunn, Democrat of Georgia, recently expressed the belief that fraud is

"pervasive at all levels" of Medicaid administration, including HEW's program to detect it.

James H. Sammons, M. D., Executive Vice-President of the AMA, has bluntly stated:

"We are tired of doctors being made the whipping boy by publicity-seeking bureaucrats and politicians. If they want to clean up Medicare and Medicaid, let them go after the unscrupulous operators of Medicaid 'mills' and that small percentage of equally unconscionable nursing home operators who prosper in every major city with political protection. They are at the root of the corruption and the fraud and abuse."

The AMA has equipped state medical societies with two pieces of model legislation to toughen the disciplinary powers of state licensing boards. How many states have adopted them?

Even so, license revocations and other disciplinary actions reported by state medical boards jumped from 179 in 1974 to 246 in 1975, and to 335 in the first eight months of 1976, according to the boards' national federation. And, for the most part, there are only M.D.'s on those boards.

Let's work as best we can with government and insurance carriers to show our concern—and to push for a cleanup.

HERE WE GO AGAIN!

One of the most distressing trends of our times is the way in which, virtually without exception, so-called health legislation touted as so essential for the public good and welfare ends up costing citizens in general—and patients, in particular—more money. Take, for example, the Clinical Laboratory Improvement Act which certainly will receive additional attention by the Congress this year. In 1976, the legislation cleared Senate and House committees, but was lost in the scramble prior to adjournment.

The medical profession has voiced many concerns about this legislation—the limited physician exemption, a requirement for annual licensure, an application of standards and licensing to intrastate laboratories, etc. But the physician exemption provision in this effort to revise entirely, and change the thrust of, current law seems best to illustrate how enactment of this measure would hit the patient in the pocketbook—again.

A proposed exemption in the language setting up strict new Federal standards and licensing for clinical laboratories would cover a laboratory such as one in the office owned and operated by a licensed physician, or a group of physicians, where *all* the tests and procedures performed *are done by such practitioners*, and in connection with treatment of their patients.

Medicine's position is that this limitation is too restrictive. Most physicians must conduct laboratory procedures through their personnel. In such instances, physicians supervise the laboratory activity, and of course are responsible for the work performed. As the only practical alternative to the exemption as proposed, the physician would have to close down the laboratory functions. And here is the major factor in all of this: patients would not only be greatly inconvenienced, but the cost of medical care would be increased. As a minimum, this language should be revised to permit an exemption where the laboratory work is performed *through employees* of the physician—without, of course, any lessening of the physician's responsibility for the work and its quality.

More specifically, the exemption under present law is an outright one for any laboratory operated by a licensed physician or group who performs laboratory tests or procedures *personally or through his or their employees*, solely as an adjunct to the treatment of his or their patients. Medicine thinks any new legislation should continue to provide for this automatic exemption.

There are other parts, too, of this complex new bill that would seem to mean higher costs to the public. One is a provision apparently designed to provide a uniformity of fees for services by a laboratory. This, taken with another provision requiring disclosure of fees to the Secretary of the U.S. Department of Health, Education and Welfare and others, apparently contemplates achieving a uniformity of fees among all laboratories in a community.

Medicine's representatives have said that while the intent here probably is to avoid a higher charge to Federal programs, it must be recognized that in many cases, particularly under Medicaid, the Federal programs pay less than customary charges for services.

Therefore, could not this provision in fact require a raising of fees under Federal programs, and thus increase the program costs which have to be paid by the individual citizen?

Then there's the suggestion that any provision stating that a prohibition against a charge higher for a Federal program than for non-Federal program charges would constitute, in effect, reverse discrimination.

What's the answer to all of this? No one really has found one yet—and one wonders if, in the overall scheme of things, anyone really is trying.

Our Readers Speak

EMERGENCY MEDICINE

In the same manner that the United States is looking back over its history and the role of the founding fathers, the American College of Emergency Physicians (ACEP) must give much of the credit for its present status to the efforts of its founders. . . .

The articles of incorporation of ACEP were drawn up in 1968 by a group of Michigan physicians in response to a local problem in their area. These men, then, might be considered drafters of the ACEP Declaration of Independence. . . .

Our "colonies" were begun in 1961 by the Alexandria Hospital in Virginia and the Pontiac General Hospital in Michigan when they independently established two types of contract, full-time emergency department coverage. Each of these types still exists. From these two colonies have developed several thousand emergency departments of today and some 15,000 physicians practicing emergency medicine.

Like this great nation which was a melting pot for the world, emergency medicine said, "Send me your downtrodden, overworked physicians" and, at first, the specialty was thought to consist of "old retired GPs," as we were told at one organizational meeting. It soon became apparent, however, that this specialty was going to require youth and vigor.

Profile Of Membership

A profile of the College membership indicated that over 25 per cent of the current ACEP membership was 35 years of age or younger. Less than 12 per cent was 60 years or older. Of the new applications received, more than 50 per cent were under the age of 35. . . .

It is, perhaps, the effect of this melting pot . . . that has allowed the College to become effective with other organizations so rapidly. Among our members are surgeons, obstetricians, family physicians, internists, psychiatrists, pediatricians, and so on, all able to relate between the ACEP and other specialty groups. The previously mentioned study revealed that approximately 45 per cent of the members were board eligible or certified in another specialty. Approximately 15 per cent of the members were surgeons, approximately 15 per cent were family physicians, and approximately 11 per cent were internists. . . .

ACEP's brotherhood stimulus now is the effort to identify ourselves with true specialists in the house of medicine. A learned judge once said, "Justice is a splendid thing but you must not *expect* justice from this life. . . .

A great deal of effort has already gone into the steps necessary for emergency medicine to become a primary specialty. First of all, ACEP became a recognized national scientific medical society in 1973. Secondly, emergency medicine became a permanent scientific section of the American Medical Association (AMA) in December of 1975. . . .

(In West Virginia there is a chapter of the ACEP and Section of Emergency Medicine in the State Medical Association structure.)

Application To ABMS

Thirdly, an application was sent in March of 1976 to the American Board of Medical Specialties (ABMS) asking that emergency medicine be designated a primary specialty. . . . This application has been referred to the Liaison Committee on Specialty Boards composed of representatives of the ABMS and the AMA Council on Medical Education. . . .

In the meantime, the American Board of Emergency Medicine (ABEM) has been formed and incorporated. Twelve physicians, representing ACEP, the University Association for Emergency Medical Services (UA/EMS) and the AMA Section on Emergency Medicine have been named to that Board. . . .

It is important to remember that ABEM is an autonomous organization and will establish its own rules and regulations relating to certification. It is expected that the mechanism suggested by the Committee on Board Establishment will be accepted by ABEM, but it is obviously not mandatory.

Certification Examination

Work continues on the certification examination and a great deal of time and effort has been provided by the Certification Task Force. . . . The examination should be ready late in 1977.

It is my own opinion that we must continue the certification process regardless of the decision of ABMS and the Council on Medical Education.

There are, of course, several reasons why emergency medicine should be a specialty with its own certification examination.

1) Emergency medicine residency programs are increasing in number. It is vital that essentials for these programs be established and that official residency review be performed. The standards for residency programs in emergency medicine were approved by the AMA House of Delegates in 1975 for the use of the Liaison Residency Endorsement Committee, consisting of representatives from ACEP and UA/EMS. This same document was referred to the Liaison Committee for Graduate Medical Education (LCGME) for its use in developing essentials for residency review by the AMA. . . . A resolution was presented to ABMS, March 26, by the American Board of Family Practice urging that the LCGME study and recommend methods that facilitate, expedite and improve the process of residency approval. The resolution was approved that day and is certainly a necessary request.

2) Certification serves to maintain high, uniform standards and protects the public from unqualified practitioners.

3) National certification would provide improved mobility for the emergency physician by identifying his professionalism.

4) The unrecognized status of emergency medicine is an obstacle to the delineation of privileges by the Joint Committee on Accreditation of Hospitals.

5) Certification would expedite medical staff appointments.

6) Lastly, but far from least, we are the largest and last group of physicians in a specialty area without the provision of certification. Certification is definitely needed to protect us from incursion of governmental regulations.

But, if we are forced to do all this independently from the American Medical Association, then it must be done in a manner above criticism. I can assure you that this is the intent and that it will be so accomplished. . . .

Harris B. Graves, M. D.
President
American College of
Emergency Physicians
Lansing, Michigan

GENERAL NEWS

AMA President Honor Guest At 110th Annual Session

Dr. John H. Budd of Cleveland, Ohio, President Elect of the American Medical Association, will be among the honor guests at the 110th Annual Meeting of the West Virginia State Medical Association which will be held at The Greenbrier in White Sulphur Springs, August 24-27.

Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee, said Doctor Budd has accepted an invitation to speak at the first session of the House of Delegates on Wednesday afternoon, August 24. Doctor Budd, a family physician, will be installed as President of the American Medical Association during the annual meeting in San Francisco in June. He will succeed Dr. Richard E. Palmer of Alexandria, Virginia, the current President.

Doctor Budd was elected President Elect of the American Medical Association at the June, 1976, Annual Convention in Dallas. He has specialized in family practice and obstetrics and gynecology in Cleveland where he has been a solo practitioner since 1937.

John H. Budd, M. D.

Doctor Budd had been a member of the AMA's policy-making House of Delegates for 10 years when he was elected to his first three-year term on the Board of Trustees in 1970. He ran unopposed in his 1973 re-election bid.

Born in New Brunswick, Canada, Doctor Budd earned his M.D. degree in 1933 from Dalhousie University in Halifax, Nova Scotia, where he received his Bachelor of Arts four years earlier. He did his first year of internship at Victoria General Hospital in Halifax and a second year at St. Vincent Charity Hospital in Cleveland. He received two years of residency training at St. Vincent and at Evangelical Deaconess Hospital, also in Cleveland.

A past Chief of Staff at Deaconess, Doctor Budd also is on the honorary medical staffs at St. Vincent and the Parma (Ohio) Community General Hospital, where he was the initial President of the medical staff.

Long active in medical society activities, Doctor Budd is a Past President of the Cleveland Academy of Medicine, and the Board of Medical and Surgical Consultants of the Cleveland Safety Department.

During his decade of service as delegate to the AMA, Doctor Budd was Chairman of the Ohio State Medical Association's nine-member delegation from 1962-1970. He was a member of the AMA's Study Committee on Planning and Development from 1967-1969. From 1974 to 1976 he served as Vice President of the AMA's Education and Research Foundation.

Doctor Budd is a trustee of Blue Cross of Northeast Ohio. He is also a past trustee of the Cleveland Medical Library Association. Other activities include membership in the Pasteur, the Medical Arts, and the Brooklyn Exchange clubs in Cleveland. He is active in numerous other health care organizations in the community. He is a member of the Ohio State Medical Association and is a Fellow of the American Academy of Family Physicians.

Recipient Of Local And State Awards

In 1973, the Cleveland Academy of Medicine bestowed its "Distinguished Membership Award" on Doctor Budd. Only 27 other members of the

Academy had been accorded that honor. Doctor Budd received its "Honors of the Academy" Award in 1967. In 1974, the Academy commissioned the painting of his portrait which is now displayed in the foyer of the Academy offices. He is the first physician to be so honored during life. Also in 1974, the Ohio State Medical Association awarded Doctor Budd its Distinguished Service Citation.

For the AMA, he is a Commissioner on the Joint Commission on Accreditation of Hospitals and is Chairman of the AMA Committee of Commissioners. He is a former AMA Commissioner on the Medical Liability Commission.

Former Orchestra Leader

An accomplished pianist, Doctor Budd is a former orchestra leader and arranger. He has may friends among prominent entertainers in the professional music field.

He is an Elder in the Lakewood Presbyterian Church.

Doctor Budd was awarded five battle stars while serving in the U.S. Army Medical Corps 4th Auxiliary Surgical Group during World War II. He was chief of a neurosurgical team in the European combat zone. Following the war he served for 25 years as an uncompensated member of the Selective Service System as medical advisor to a draft board in Cleveland.

He and his wife, Irma, have two sons, John Jr., an attorney in Phoenix, Arizona, and Charles, an orthopaedic surgeon practicing in Spartanburg, South Carolina.

General Session Plans

Several prominent physicians have accepted invitations to present papers at the three general sessions during the Annual Meeting, again to be held on Thursday, Friday and Saturday mornings, Doctor Bell likewise has announced.

The first scientific session on Thursday morning, August 25, will offer a "Symposium on the Multiple-Trauma Patient." Further program details will be provided in upcoming issues of *The Journal.*

Business Meetings Schedule

The Medical Association's Council will hold its regular pre-convention meeting on Wednesday morning, August 24. The first session of the House of Delegates on Wednesday will be followed on Saturday, August 27, by the second and final House session.

There again are indications that sections and societies affiliated with the Medical Association will be scheduling breakfast and other scientific and business meetings on Friday and Saturday.

AMA Accreditation Helps WVU's CME Program To Advance Rapidly

An unheralded, but major advance for the West Virginia University School of Medicine occurred when its continuing medical education program was approved by the American Medical Association in 1976. The accreditation has vitalized the continuing education program as it moves into its third calendar year.

In response to increasing demands by agencies, accrediting bodies and specialty recertification boards, the School of Medicine formally established its continuing education office in January, 1975. At the request of Dean John E. Jones, M. D., N. LeRoy Lapp, M. D., Associate Professor of Medicine, accepted a post as Assistant Dean and immediately began to set up and coordinate all School of Medicine continuing education programs. Results followed quickly.

Within six months, provisional approval had been granted, programs were under way and preparations were progressing for a December official accreditation visit.

Accredited In July, 1976

By July, 1976, WVU School of Medicine was named an approved sponsor of continuing medical education programs by the AMA's Council on Continuing Medical Education.

The varied types of programs include every department and division of the School of Medicine.

Twenty-five short courses, symposia, teaching days and seminars were held during the 1975-76 school year on the School of Medicine's Morgantown, Charleston and Wheeling campuses. An even greater number is scheduled for 1976-77. In addition, the office coordinates more than 60 weekly conferences, visiting professor programs and other on-going accredited activities.

All programs are acceptable for Category I credit or activities on an hour-for-hour basis toward the Physician's Recognition Award of the American Medical Association. Listed in the individual brochures are those which are acceptable also as prescribed credit activities by the American Academy of Family Physicians.

Participants contact WVU's Continuing Education Unit Program to obtain transcripts documenting their completion of courses sponsored or co-sponsored by the School of Medicine.

Attendance at each program averaged 40 to 50 persons during the first year, and a slight increase has been noted this year. At every course, participants fill out evaluation forms which include space for suggested topics and improvements in the program.

Outreach Program Progressing

Outreach efforts by the office seem to be progressing well, too. Continuing education programs have been conducted in Parkersburg and Elkins on cardiology; in Elkins on neonatal problems,

and this year there is a regular (usually monthly) visiting professor program with practitioners at Fairmont Clinic, Stonewall Jackson Hospital in Weston, Jackson General Hospital in Ripley and, through the Charleston Division, the Hygeia Clinics in Whitesville and Logan. Local planning committees determine and then submit listings of their needs. From these the office suggests topics and speakers to meet those needs.

The continuing education office also publicizes and helps make available through the Medical Center libraries in Morgantown and Charleston a variety of self-instructional programs.

The office has a mailing list of 5,000 physicians in West Virginia and surrounding counties of Southwestern Pennsylvania, Western Maryland and the Ohio Valley. Recently, it sent a questionnaire asking for suggestions about topics, best times for programs and how much notice is needed, to name a few. Each physician also received an updated supplement of courses not included in the original schedule. The responses—several hundred, so far—will be used to plan the 1977-78 programs.

Larger Staff Needed

Because of an expected increase in outreach projects and additional work involved with growth, the office will need to enlarge its staff, including a full-time coordinator of programs in the Medical Center office in Morgantown.

The present staff, in addition to Doctor Lapp, includes: Pamela DeVall, secretary in the Morgantown office; Robert D. Whitler, Coordinator of Continuing Education in the Charleston Division, and William Gardner, M. D., Coordinator of Continuing Education in the Wheeling Division.

State Physicians Elevated By Specialty Groups

Five State physicians who have been elected to Fellowship or similar standing in their national specialty organizations recently have been reported to *The Journal.*

Named Fellows of the American College of Chest Physicians were Drs. Dominic J. Gaziano of Charleston, Juan F. Gutierrez of Morgantown and Benjamin J. Plybon of Ronceverte.

Named Diplomates (Psychiatry) of the American Board of Psychiatry and Neurology, Inc. were Drs. Joel Allen of Morgantown and Kenneth M. Fink of Huntington.

Mrs. Robert R. Pittman, Former Auxiliary President, Dies

Mrs. Robert R. Pittman of Martinsburg, President of the Woman's Auxiliary to the West Virginia State Medical Association in 1959-60, died on January 3, it was learned by *The Journal.*

Doctor Pittman, an anesthesiologist, was a member of the State Medical Association's Council from 1970 to 1974.

Mrs. Pittman had been a resident of Martinsburg for about 10 years. The Pittmans were residents of Marlinton when Mrs. Pittman served as State Auxiliary President.

A native of Fairmont, North Carolina, Mrs. Pittman was graduated from East Carolina Teachers College and taught in the public schools of North Carolina for 10 years following graduation. She also taught in Maryland for two years.

She was married in 1945 to Doctor Pittman, also a native of North Carolina. Doctor and Mrs. Pittman moved to West Virginia in 1950.

In the left photo, West Virginia's representatives engage in some informal discussion prior to the first session of the House of Delegates at the American Medical Association's Clinical Convention December 5 in Philadelphia. From left, are Drs. Harry S. Weeks, Jr., of Wheeling, an Alternate Delegate; Frank J. Holroyd of Princeton, a Delegate, and George R. Callender, Jr., of Charleston, also an Alternate. Doctor Weeks served for Dr. Richard E. Flood of Weirton, the State Medical Association's other Delegate, during the opening House session because Doctor Flood was occupied with another meeting. In the photo at the right, Drs. Stephen D. Ward (left) of Wheeling, Editor of the West Virginia Medical Journal, and Dr. Robert D. Hess of Clarksburg, the State Medical Association's Vice President, take some time after a luncheon to talk about Association affairs. Doctor Ward also is a member of the AMA's Council on Legislation.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. N. LeRoy Lapp, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Feb. 24	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Mar. 2-4	Selected Topics in Internal Medicine Cosponsored by American College of Physicians	Morgantown
Mar. 12	High-Risk Pregnancy Conference	Charleston
Mar. 24	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Mar. 25	Fourth Annual Newborn Day	Charleston
Mar. 25, 26	Cancer Teaching Day—Human Cervical Cancer	Morgantown
Apr. 1-2	Psychosomatic Medicine	Charleston
Apr. 2	Cardiology Teaching Day	Parkersburg
Apr. 15-17	Annual Scientific Assembly, Department of Family Practice	Morgantown
Apr. 16	Surgery Day	Wheeling
Apr. 22	Third Annual ENT Teaching Day	Morgantown
Apr. 22	Jackson General Hospital Visiting Physician Program	Ripley
Apr. 28	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Apr. 29, 30	Present and Future of Microbiology—The Role of Automation	Morgantown

Topics Listed For Internal Medicine ACP-WVU Course March 2-4

"Selected Topics In Internal Medicine," a three-day continuing education course, will be co-sponsored by the American College of Physicians and the West Virginia University Medical Center March 2-4 at the Lakeview Country Club in Morgantown.

Topics for the course will include:

Wednesday, March 2, A. M. Session, Infectious Diseases—Immunology: "Infectious Diseases and Primary Medical Care," "Pneumonia Developing in Hospitalized Patients," "Antibacterial Chemotherapy—Recent Trends," and "Immunodeficiency Diseases;"

Gastroenterology: "Viral Hepatitis — Clinical-hepatic Aspects," "Virological Aspects, 1977;"

P. M. Session (Gastroenterology continued): "Inflammatory Bowel Diseases," "The Management of Peptic Ulcer Disease," and "Endoscopic Retrograde Cholangiography and Pancreatography: Present and Future;"

Hematology-Oncology: "Hypochromic Anemias," "Hemophilia and Congenital Bleeding Disorders," "Multiple Myeloma;"

Thursday A. M. Session (Hematology-Oncology continued): "Non-Hodgkins Lymphoma," "The Rationale and Application of Adjuvant Chemotherapy for Primary Cancer," "Current Concepts in Management of Gatrointestinal Cancer," and "Discussion of Representative Examples of Gastrointestinal Cancer;"

Nephrology: Urinary Sediment Pattern Reading for Renal Diagnosis," "Lupus Nephritis: Natural History and Treatment," "The Role of Infection in Chronic Renal Failure;"

P. M. Session (Nephrology continuing): "Renal Biopsy in the Understanding of Renal Disease;"

Endrocrinology-Metabolism (Devoted to Diagnostic Endocrinology): "Pituitary Hormones," "The Thyroid Gland," "The Parathyroid Glands," "Ovaries," "The 'Endocrine' Pancreas," "The Adrenal Glands," and "Lipid Disturbances;"

Friday A. M. Session, Rheumatology: "Metabolic Bone Diseases," "Laboratory Tests in Rheumatoid Diseases," "Inflammatory Muscle Disease," and "New Anti-Inflammatory Drugs;"

Pulmonary Diseases: "Occupational Asthma," "Use of Newer Bronchodilators," "Patterns of Air-

way Response," and "Demonstration of X-Rays, Flow-Volume Loops, etc.;"

P. M. Session, Cardiology: "Microbiological and Therapeutic Aspects of Bacterial Endocarditis," "Non-invasive Diagnostic Techniques," "Introduction to the Workbook Sessions," "The 12-Lead Electrocardiogram and Dynamic (24-hour) Electrocardiogram," "The Phonocardiogram, Carotid Pulse Tracing, Apex Cardiogram and Echocardiogram," and "The Bicycle Ergometer Stress Test."

The faculty will include faculty members from the WVU Department of Medicine and a guest faculty of six. For names of the guest faculty, registration information and other details see the January issue of *The Journal.*

'Carcinoma Of Cervix' Cancer Course Topic At WVU

"Carcinoma of the Cervix" will be the topic for the 13th annual Cancer Teaching Days, Friday and Saturday, March 25-26, at West Virginia University Medical Center.

Guest speakers for the continuing course for physicians will be Dr. Felix Rutledge, Department of Gynecology, M. D. Anderson Hospital, Houston, Texas; and Dr. Hugh Shingleton, Department of Gynecology, University of Alabama Medical Center, Birmingham.

Also included in Friday's program are Dr. Fernando Giustini of Wheeling, who will discuss "Colposcopy in Private Practice," and Dr. Carole Boyd, Assistant Professor of Pathology, WVU School of Medicine, whose subject will be "Cytologic and Histologic Review of Cervical Epithelial Neoplasia."

Dr. Josh Tunca, Assistant Professor of Obstetrics and Gynecology, WVU School of Medicine, will be chairman for this event and will speak Friday on "The Transformation Zone."

Fairmont Clinic CME Program Approved By Association

The continuing medical education program of the Fairmont Clinic has been approved by the State Medical Association through its Committee on Medical Education and Hospitals.

The clinic was granted a two-year provisional approval (effective January 7, 1977) for a newly-developing program. Credit for Category 1 of the Physician's Recognition Award of the American Medical Association was approved retroactively to November 17, 1976, the date of the site survey.

The members of the survey team were Drs. Hu C. Myers of Philippi, Chairman, and Creel S. Cornwell, Jr., of Clarksburg.

Medical Meetings

Feb. 3-8—Am. Academy of Orthopaedic Surgeons, Las Vegas.

Feb. 6-9—Am. Society of Abdominal Surgeons, New Orleans.

Feb. 9-13—Am. College of Nuclear Physicians, New Orleans.

Feb. 28-March 3—Am. College of Cardiology, Philadelphia.

March 24-27—ASIM, Kansas, Mo.

March 26-31—Am. Academy of Allergy, New York City.

March 28-31—ACS, Los Angeles.

April 3-9—Am. Assn. of Immunologists, Chicago.

April 13-16—Am. Gynecological Society, Litchfield Park, Ariz.

April 16—W. Va. Assn. of Blood Banks, Charleston.

April 17-21—Am. Academy of Pediatrics, New Orleans.

April 17-22—Am. College of Radiology, Houston.

April 18-21—ACP, Dallas.

April 20-22—Medical & Chirurgical Faculty of Md., Cockeysville, Md.

April 22-23—Am. Heart Assn., Williamsburg, Va.

April 22-24—W. Va. Chapter, AAFP, Morgantown.

April 24-27—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

April 25-30—Am. Academy of Neurology, Atlanta.

April 29-May 1—Am. Trauma Society, Chicago.

May 4-7—W. Va. Chapter, ACS, White Sulphur Springs.

May 8-9—Am. Otological Society, Boston.

May 15-18—Am. Thoracic Society, San Francisco.

May 15-19—Ohio State Medical Assn., Columbus.

May 25-28—Am. College of Sports Medicine, Chicago.

May 30-June 1—Am. Ophthalmological Society, Hot Springs, Va.

June 5-7—Am. Diabetes Assn., St. Louis.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Nov. 6-9—Southern Medical Assn., Dallas.

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Management Of Abnormal Female Genital Tract Cytology By Colposcopy

Josh C. Tunca, M. D.; and Loraine T. Withersty, M. D.

In the last decade, the colposcope has produced a revolutionary change in the diagnosis and management of abnormal female genital tract cytology, but especially in the diagnosis of intra-epithelial neoplasia of the cervix uteri. Before the use of the colposcope as a clinical tool, patients with abnormal cervical cytology were usually managed by conization or by multiple, random, punch biopsies. Today, it is well known that conization may be a complicated procedure, especially in pregnancy, and that random punch biopsies may be totally inadequate for precise diagnosis. In this paper, we will review the results of 107 West Virginia University Hospital patients with female genital tract abnormal cytology and/or cervical gross lesions and their management with colposcopy.

The Authors

- **Josh C. Tunca, M. D., Assistant Professor and Director, Gynecologic Oncology, Department of Obstetrics and Gynecology; and Loraine T. Withersty, M. D., Instructor, Department of Obstetrics and Gynecology, West Virginia University Medical Center, Morgantown.**

Materials and Methods

The colposcope is a binocular instrument that gives a stereoscopic view enlarged 6 to 40 times. The cells are not observed but instead color tone, vascular structure, demarcation of lesion, and surface pattern are visualized. Normal and abnormal epithelium may be selected with ease and selective discrete biopsies may be performed. For more technical detail, the reader is referred to excellent colposcopy tests.[1,2]

Patients with abnormal female genital tract cytology are routinely referred to the Colposcopy Clinic for evaluation and diagnosis of genital tract pathology. During February, 1975, to February, 1976, 107 patients with abnormal genital cytology and/or gross cervical lesions were evaluated in the Colposcopy Clinic of West Virginia University Hospital.

The technique of colposcopy in our clinic includes the following:

1. Repeat cytology smear is obtained.
2. Normal saline is applied and the vascular structure of the epithelium is then observed.
3. Three per cent acetic acid is applied and the transformation zone is observed.
4. If indicated, one, or at most, two biopsies are obtained under direct colposcopic observation by Kevorkian-Younge biopsy forceps. Postbiopsy bleeding is stopped by application of Monsel's solution and/or local pressure.
5. With abnormal cervicel cytology, if the whole transformation zone and squamocolumnar junction is not visualized, cone biopsy is performed. Cone biopsy is also performed if there is a gross discrepancy between cytology, colposcopic impression and histologic diagnosis of colposcopically-directed tissue biopsy. As Table 1 indicates, Stafl-Kolstad criteria are applied for

TABLE 1

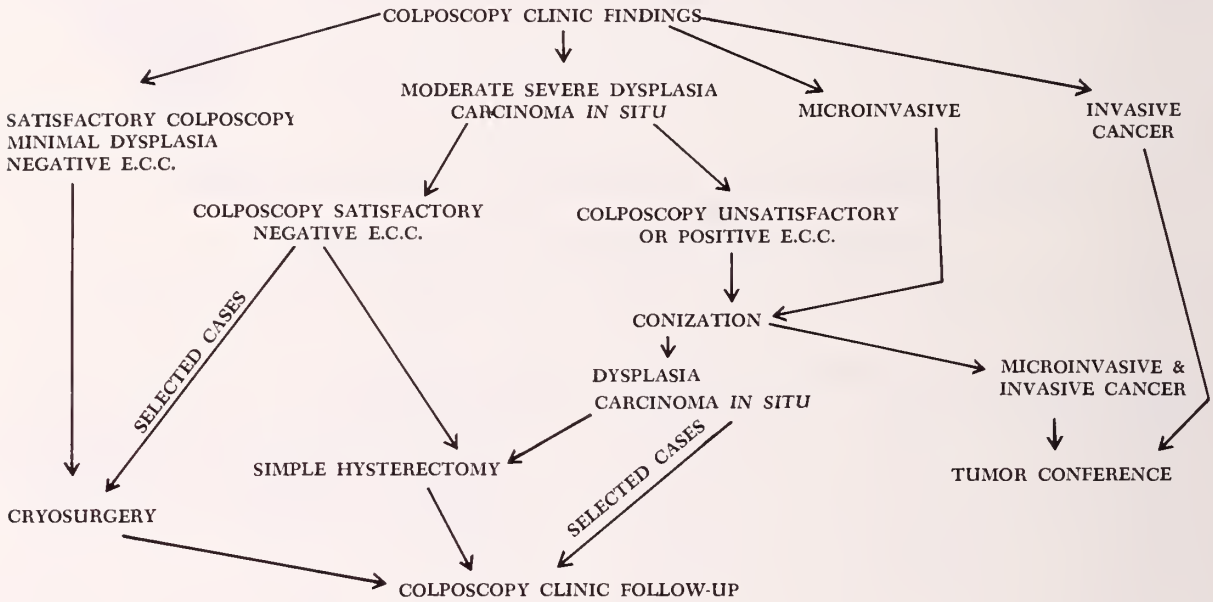
Stafl-Kolstad Criteria for Evaluation of the Cervix

1. Vascular pattern of the epithelium
2. Intercapillary distance
3. Surface pattern of epithelium
4. Color tone
5. Borders of the lesion

TABLE 2

Management of Abnormal Cervical Cytology

1. Minimal dysplasia and above or Class II and above will be evaluated
2. Repeat Pap smear will be obtained
3. Cervix will be thoroughly examined with colposcopy
4. Colposcopically-directed cervical biopsies will be obtained
5. Endocervical curettage (E.C.C.) will be performed except for pregnant patients



colposcopic examination of surface epithelium of the female genital tract.

Referral to the Colposcopy Clinic is made primarily for abnormal cervical cytology ranging from Class II smears to smears suspicious for invasive cervical carcinoma. Other reasons for referral include the presence of gross cervical lesions, abnormal vulvar or vaginal cytology or a history of exposure in utero to Diethylstilbestrol. Cervical pathology is managed according to current protocol (Table 2).

In the pregnant patient with focal colposcopic lesion, immediate diagnostic conization is performed only if there is a major discrepancy between the diagnosis in directed biopsy and cytology or if the transformation zone, having extended into the endocervical canal, is not totally visible, while cytology is highly suspicious of invasive cancer. After colposcopic evaluation, if conization is not performed, patients are managed by Pap smears. Pap smears are taken every three months during pregnancy and the patients are re-evaluated six weeks postpartum by colposcopy. A final decision as to the management of each patient is made at the time of the colposcopic exam.

Results

A total of 107 patients with abnormal female genital tract cytology and/or gross cervical lesions were evaluated with colposcopy:

1. Seventy-one patients had cytological diagnoses ranging from mild dysplasia to carcinoma *in situ*. In 60 of these patients, colposcopy was satisfactory and the whole transformation zone was observed. Directed biopsy results are in Table 3.

2. In 11 patients cone biopsy was performed due to unsatisfactory colposcopy, namely, the whole transformation zone and squamocolumnar

TABLE 3

Pathologic Diagnosis of Colposcopically-Directed Cervical Biopsies

60 Patients with Abnormal Cervical Cytology Colposcopy Satisfactory	
Negative	17
Mild dysplasia	18
Moderate dysplasia	8
Severe dysplasia	9
Carcinoma *in situ*	7
Invasive carcinoma	1
	60

TABLE 4

Pathology Results of Cervical Conization

11 Patients with Abnormal Cervical Cytology Colposcopy Unsatisfactory	
Negative	1
Mild dysplasia	2
Moderate dysplasia	1
Severe dysplasia	4
Carcinoma *in situ*	3
	11

junction were not observed adequately. Results are reported in Table 4.

3. Nine patients with maternal Diethylstilbestrol exposure were evaluated with colposcopy as shown in Table 5.

4. Sixteen gross cervical lesions were evaluated with the colposcope as shown in Table 6.

5. Lastly, 11 patients with abnormal vaginal or vulvar cytology were evaluated as shown in Table 7.

If the colposcopic examination was satisfactory and the whole transformation zone was observed, cervical cryosurgery was performed as definitive treatment or cervical pathology, ranging from mild dysplasia to carcinoma *in situ*. Three months later, cervical cytology was repeated and if persistence of cervical abnormality was observed, another course of cryotherapy was applied. Simple hysterectomy was offered in lieu of cryosurgery when the patient had finished her childbearing period.

Discussion

Since Hinselman first invented the colposcope in 1925, much has been learned regarding the true nature of intra-epithelial neoplasia, especially occurring on the cervix. The preoccupation of clinicians with such "naked eye" descriptions as erosion, cervicitis, diseased and reddened cervix serves only to prove the inadequacy of gross examination. Subsequently, most of these disease entities with the usage of the colposcope have proven to be physiological.[3]

TABLE 5

Diethylstilbestrol Exposure In Utero

9 Patients	
Negative	8*
Severe dysplasia	1
	9

*5 patients colposcopically had pseudo-mosaic appearance.

TABLE 6

Pathological Diagnosis of 16 Patients With Gross Cervical Lesions

16 Patients with Gross Cervical Lesions	
Chronic cervicitis	13
Condyloma acuminata or papilloma	2
Cervical sarcoma	1
	16

Aside from its usefulness in quickly identifying physiological states and in distinguishing them from pathological lesions, the real value of colposcopy lies in its ability to screen patients with *known abnormal* cytology. While the Papanicolaou smear is a good method for general mass screening, the colposcopy provides an important additional means for increasing accuracy in diagnosis and treatment after abnormal cytology is discovered. A survey of 321 cases of preclinical carcinoma of the cervix at King George's Hospital in Sydney, Australia,[3] indicated that the per cent positive findings with cytology alone were 93 per cent and with colposcopy alone, 92 per cent. However, when combined, the accuracy rose to 98 per cent. Thus, the two procedures are complementary.

With the colposcope, it is possible to delineate precisely the site in which abnormal cells are being shed, thus permitting discrete biopsy and pathologic diagnosis. This, therefore, eliminates 85 per cent of cervical conizations and makes four-quadrant or multiple random biopsies obsolete.[4]

The colposcope has special value in the management of abnormal cervical cytology during pregnancy when the dangers of cervical cone biopsy are well known: hemorrhage, cervical laceration, abortion and premature labor.[5]

Summary

Management of 107 cases with abnormal female genital tract cytology and/or gross lesions by colposcopy have been reviewed. The most important usage of colposcopy is in the diagnosis and management of abnormal cervical

TABLE 7

Pathology of 11 Patients with Vulvar-Vaginal Abnormal Cytology

Negative	2
Moderate dysplasia	1
Severe dysplasia	3
Invasive cancer	5
	11

cytology in which the need for cervical cone biopsies may be nearly eliminated. Its further usefulness is for follow-up of DES-exposed patients, patients with suspected vulvar or vaginal neoplasia, and for identification of physiological rather than pathological conditions when "a cervical lesion" has been demonstrated.

It is currently unnecessary and only of historic interest to debate the role of conization versus multiple, random biopsies because of the better means of clinical evaluation of the patient with abnormal cervical cytology with the colposcope.

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Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 1/2 by 11 in.) white paper. Wide margins (at least 1 1/4 in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

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Induction Of Ovulation

F. G. Giustini, M. D.

One hundred seventy-nine couples were seen in a private office setting with a problem of either primary or secondary infertility. Induction of ovulation was carried out by the use of clomiphene citrate, clomiphene citrate and HCG or clomiphene citrate-pergonal-HCG.

One hundred seventy-nine patients were treated with clomiphene citrate and ovulation was obtained in 62 per cent, with a pregnancy rate of 47.5 per cent. After induction of ovulation with clomiphene failed, 23 patients received clomiphene citrate and HCG with an ovulation success rate of 39 per cent and a pregnancy rate of 26 per cent. Eighteen couples who had failed to ovulate with clomiphene, with or without HCG, were treated with clomiphene citrate-pergonal-HCG. There was a 94.4 per cent ovulation rate and a 27.7 per cent pregnancy rate.

The data concerning the histology of the endometrium are presented as well as data regarding 18 patients whose husbands were oligospermic and 14 patients who exhibited hirsutism. Associated pathology, in addition to anovulation, was found to be present in 15 patients. The result in this group of patients is presented.

The data of 15 patients whose induction of ovulation resulted in abortion are presented and, finally, data regarding pregnancies and subsequent menstrual patterns in patients who have been treated with induction of ovulation are presented.

The Author

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Infertility Due to Anovulation

The liberalization of the abortion law has resulted in the closure of a great number of adoption agencies and in the overall loading of rosters of adoptive couples to the point where, at the present time in certain areas of the country, it is almost impossible to apply for adoption. A consequence of this has been a significant increase in the number of couples who seek medical advice because of infertility.

It has been estimated that 15 per cent of married couples in the general population of this country have a problem of either primary or secondary infertility and, that in 15 per cent of these infertile couples, the problem is due to anovulation. Prior to 1958, lack of ovulation presented a formidable therapeutic problem and induction of ovulation was practically impossible. It was in that year that Gemzell[1] reported on a successful induction of ovulation by the use of human pituitary FSH coupled with human chorionic gonadotropin. The use of these compounls was, however, associated with almost prohibitive incidence of fetal and maternal complications. These compounds were only experimental in nature and could be used only by practitioners who had access to the most sophisticated laboratory facilities. The toxicity and side effects associated with these compounds restricted their use to a limited number of selected patients in a few medical centers.

In 1960, Kistner and Smith[2] reported the accomplishment of induction of ovulation and pregnancies by the use of MER-25, a non-steroidal estrogen antagonist produced by the Merrell Company. It was not until 1961 that induction of ovulation became available to the greatest percentage of patients who, after thorough investigation, were found to be infertile because of anovulation. Greenblatt[3] and co-workers in that year reported on the successful induction of ovulation in 36 patients treated with clomiphene citrate. Since this report there has been an increasing number of papers in the literature reporting experience with clomiphene citrate. McGregor[4] and associates reported on the collected experience of over 4,000 cases. Clomiphene citrate is closely similar to Tace, a non-steroidal compound developed by Merrell. The drug is inexpensive and, above all, is void of the many side effects—at times catastrophic—associated with the use of the gonadotropins. The occurrence of clomiphene-induced ovulation is 65 to 80 per cent with a reported pregnancy rate of 30 to 35 per cent. One may further improve the results by a strict patient selection. It is, in fact, known that infertility is due to multiple factors in 15 per cent (or more) cases. These infertility factors may be multiple in the female and may be found in both the male and female. It is, therefore, mandatory that a complete workup must be done and that the entire range of infertility investigation be completed prior to the administration of the needed therapy.

Material and Method

This paper is the reported personal experience in a private gynecological practice and deals with induction of ovulation by the use of three methods:

1. Clomithene citrate alone
2. Clomithene citrate followed by HCG
3. Clomithene citrate, pergonal and HCG

The method of infertility work-up is seen in Table 1. It is the collected experience of six years and involves 179 couples. Each couple was thoroughly investigated as outlined above; and, for the purpose of this presentation, the patients were divided into two groups (Table 2). There were 131 patients with primary infertility and 48 with secondary infertility. The age ranged from 22 to 35 years of age. The methods utilized to induce ovulation are seen in Table 3. The patient was considered to have ovulated if:

1. She became pregnant
2. The basal temperature curve indicated that ovulation had occurred
3. On the basis of an endometrial biopsy resulting in a secretory endometrium

The results in the two groups of patients when placed on clomid therapy may be seen in Table 4.

Table 5 shows the type of endometrial histology found in the endometrial biopsy specimen of the amenorrhea-oligomenorrhea group of 72 patients. The endometrial biopsies were done when possible as outpatient procedures. There were, however, a number of patients who underwent the endometrial sampling under general anesthesia at the time of laparoscopy. The timing of the endometrial sampling was made to coincide with either the first day or on day 21 to day 23 of the menstrual cycle. The largest number of patients had an endometrium which was proliferative in character: there were 61 such patients; five patients had proliferative glandular hyperplasia.

TABLE 1
Infertility Workup

A. Complete and accurate history of both partners to evaluate:
   A. Coital pattern and methodology
   B. Identification of medical problems:
      1. Diabetes
      2. TBC
      3. Rh incompatibility
      4. Others
B. Identification and correction of associated pelvic pathology:
   A. Endometriosis
   B. Pelvic inflammatory disease
   C. Myomas
   D. Cervical Factors
   E. Others
C. The presence of anovulatory pattern must be proved by:
   A. Basal body temperature
   B. Endometrial biopsy
D. Tubal patency studies:
   A. CO_2
   B. HSG
   C. Laparoscopy with methylene blue irrigation of fallopian tubes
E. Investigation of male factor including an anti-spermatozoa agglutination test

TABLE 2

Group I	
Patients with amenorrhea-oligomenorrhea	
A. Stein-Leventhal	13
B. Post-pill amenorrhea	12
C. Depoprovera-induced amenorrhea	2
D. Amenorrhea-oligomenorrhea (Hypothalamic)	43
E. Galactorrhea-amenorrhea (Chiari-Frommel)	2
	72
Group II	
Patients with anovulatory cycles	107
Total	179

Table 6 shows the endometrial histology of group II. Table 7 shows the endometrial histology of the entire patient population. The largest group of 134 had proliferative endometrium, followed by 23 patients with proliferative glandular hyperplasia, 14 patients with hyposecretory endometrium, five with atrophic endometrium, two with adenomatous hyperplasia, and one patient with atypical hyperplasia.

The experience with the group of patients who were placed on clomiphene citrate and human chorionic gonaditropins is seen in Table 8. There were 23 patients, nine of whom ovulated and six of whom became pregnant a total of seven times. There were six term deliveries, one patient not delivered at the time of this study, and two patients who have become pregnant since the therapy.

Table 9 shows the experience with clomiphene citrate, pergonal and human chorionic gonadotropins (HCG). There were 18 patients in this group. These were patients who had failed to

TABLE 3
Methodology of Treatment

Clomiphene Citrate	50 Mg/D starting on day 5 of cycle × 5 days × 2 M. If failure of ovulation, Clomid was increased every month by 50 Mg/D to a maximum of 200 Mg/D.
Clomiphene Citrate + HCG	Clomiphene as above on day 12 of the cycle patient received 10,000 U of HCG
Clomiphene Citrate + Pergonal + HCG	Clomiphene as above on day 12 1 amp. Pergonal (this may be increased to an additional amp. of Pergonal) on day 19 10,000 units of HCG

TABLE 4
Results of Clomid Therapy

	Number of Patients	Ovulation	Pregnancies Pt.	Total Preg.	Abortions	Delivered	Not Delivered*	Post Therapy Pregnancies**
Group I Stein-Leventhal	13	6	6	6		5	1	
Post-pill amenorrhea	12	9	9	7	2	4	1	
Post Depoprovera amenorrhea	2	2	2	2		2		
Amenorrhea oligomenorrhea	43	27	21	24	2	16	6	7
Chiari-Frommel	2	2	1	1		1		
	72	46	39	40	4	28	8	7
Group II	107	65	46	51	11	33	7	8
Total	179	111	85	91	15	61	15	15
Per cent		62.0	47.5		16.5	67.0	16.5	16.5

* Not delivered at the time of the report
** Number of patients who became pregnant the second time without need of induction of ovulation

ovulate and become pregnant with the administration of clomiphene, or clomiphene and HCG.

Side effects of the drug therapy administered can be seen in Table 10. There were a total of 79 patients who did experience some side effects. They were all minimal side effects which disappeared as soon as therapy was discontinued. Eight patients developed side pain with ovarian cystic enlargement, 50 patients developed hot flashes, while 21 complained of nausea. Of the 139 patients, eight patients experienced significant enlargement of the ovaries that necessitated the discontinuation of the drug. None of these patients, however, required surgery. When these patients were examined at weekly intervals the ovarian cystic changes were found to regress spontaneously within two or three weeks.

An interesting group of patients were those in whom the problem of anovulation was associated with the husband or partner who had oligospermia. We considered oligospermia anything below 25 million spermatozoa. There were 18 such patients: nine ovulated, six became pregnant nine times, two aborted, three delivered at

TABLE 5
Endometrial Histology — Group I

	Number of Patients	Ovulation	Pregnancies Pt.	Total Preg.	Abortions	Delivered	Not Delivered*	Post Therapy Pregnancies**
Atrophic	5	4	4	4	1	3		
Proliferative	61	37	30	31	3	21	7	6
Proliferative glandular hyperplasia	5	4	4	4		4		1
Adenomatous hyperplasia	1	1	1	1			1	
Total	72	46	39	40	4	28	8	7
Per cent		63.0	54.0		10.0	70.0	20.0	17.9

* Not delivered at the time of the report
** Number of patients who became pregnant the second time without need of induction of ovulation

TABLE 6

Endometrial Histology — Group II

	Number of Patients	*Ovulation*	Pregnancies *Pt.*	*Total Preg.*	*Abortions*	*Delivered*	*Not Delivered*	*Post Therapy Pregnancy*
Atypical hyperplasia	1	1	1	2	1	1		
Proliferative	73	40	27	29	3	20	6	4
Proliferative glandular hyperplasia	18	16	13	15	7	7	1	2
Adenomatous hyperplasia	1							
Hyposecretory	14	8	5	5		5		2
Total	107	65	46	51	11	33	7	8
Per cent		60.7	42.0		21.6	64.7	13.7	17.3

TABLE 7

Endometrial Histology — Combined Groups I and II

	Number of Patients	*Ovulation*	Pregnancies *Pt.*	*Total Preg.*	*Abortions*	*Delivered*	*Not Delivered*	*Post Therapy Pregnancy*
Atrophic	5	4	4	4	1	3		
Proliferative	134	77	57	60	6	41	13	10
Proliferative glandular hyperplasia	23	20	17	19	7	11	1	3
Adenomatous hyperplasia	2	1	1	1			1	
Atypical hyperplasia	1	1	1	2	1	1		
Hyposecretory	14	8	5	5		5		2
Total	179	111	85	91	15	61	15	15
Per cent		62.0	47.0		16.5	56.0	16.5	17.6

TABLE 8

Clomid and HCG

	Number of + Patients	*Ovulation*	Pregnancies *Pt.*	*Total Preg.*	*Delivered*	*Not Delivered*	*Post Therapy Pregnancies*
Proliferative	16	6	4	4	3	1	2
Glandular hyperplasia	3	3	2	3	3		
Hyposecretory	2						
Atrophic	2						
Total	23	9	6	7	6	1	2
Per cent		39.0	26.0		85.7	14.3	33.3

TABLE 9
Clomid-Pergonal-HCG

Number of Patients	*Ovulated*	*Pregnant*	*Delivered*	*Aborted*	*Not Delivered*
18	17	5	3	1	1
Per cent	94.4	27.7			

TABLE 10
Side Effects (179 Patients)

	Patients	*Per cent of Total Patients*
Side pain with ovarian cystic enlargement	8	4.5
Hot Flashes	50	27.0
Nausea	21	12.0
Total	79	44.0

term, two were not delivered at this writing (Table 11). There was a group of patients who exhibited hirsutism in association with their complaint of amenorrhea or anovulatory cycles. These results in this group of patients are seen in Table 12. These patients were studied and all of them, with the exception of one, were considered to have idiopathic hirsutism.

There were 15 patients in whom anovulation coexisted with other pelvic pathology requiring treatment prior to therapy for induction of ovulation. Table 13 shows the type of pathology involved. Table 14 shows the results obtained in this group: 11 patients ovulated, nine became pregnant a total of 13 times, two aborted, 11 had term gestations, and two patients became pregnant after.

Because of the fact that multiple factors may be responsible for the infertility, it becomes absolutely necessary to study completely the couple and that no therapy be applied prior to termination of the entire investigation.

In this study of 179 couples, considering those patients whose husbands had oligospermia and those patients in whom other pelvic pathology coexisted with anovulation, anovulation was the sole cause of infertility in 148 couples; however, in 31 couples anovulation was associated with other factors responsible for the infertility. Table 15 shows the multiplicity of factors. The study shows that in 10 per cent of couples there was a male factor and that in 17.3 per cent of couples there were multiple infertility factors at work.

It has been stated that patients who become pregnant in the first two or three cycles of induced ovulation have a higher incidence of abortions. In our study there were 15 abortions and it is to be noted that four of these patients were married to men in whom there was marked oligospermia. The identification of the cycle in which the pregnancy took place in these patients who aborted is seen in Table 16. The greatest number of patients aborted in the first three cycles. There were eleven patients out of 15 who became pregnant and aborted in the first, second or third cycle of clomid therapy, and one patient who aborted in the third cycle of clomid-pergonal-HCG. Only four patients out of 15 aborted after

TABLE 11
Patients Whose Husbands Had Oligospermia

Number of Patients	*Ovulation*	*Pregnant Patients*	*Number of Pregnancies*	*Abortions*	*Term*	*Not Delivered*
18	9	6	9	2	5	2
Per cent	50	33.33		22.22	55.55	22.22

TABLE 12
Hirsute Patients

	Number of Patients	*Ovulation*	Pregnancies *Pt.*	*Total Preg.*	*Abortions*	*Delivered*	*Not Delivered*	*Post Therapy Pregnancy*
Amenorrhea	9	5	5	5		4	1	2
Anovulatory	5	4	4	8	2	6		2
Total	14	9	9	13	2	10	1	4
Per cent		64.21	100		15.38	76.15		44.44

TABLE 13
Types of Associated Pathology

Ovarian cysts (serous cystomas)	2
Endometriosis	2
Myomas	1
Carcinoma *in stiu* of cervix and Bowen's disease of vulva	1
Marked and extensive chronic cystic cervicitis	2
Large bilateral polycystic ovaries	2
Bilateral hydrosalpinx	2
Tubo-ovarian abscess	1
Gartner's duct cyst and cervical dysplasia	1
Peritubal adhesions	1

TABLE 14
Patients With Anovulation And Associated Pathology

Number of Patients	*Ovulation*	Pregnancies *Pt.*	*Total Preg.*	*Abortions*	*Term*	*Post Therapy Pregnancies*
15	11	9	13	2	11	2
Per cent	73.33	60.0		15.38	84.61	22.22

TABLE 15
Multiple Factors Causing Infertility In 179 Couples

Anovulation alone	148
Anovulation + oligospermia	18
Anovulation — A.S. AGGL. ++	1
Anovulation — A.S. AGGL. ++ — ovarian cyst	1
Anovulation — myomas	1
Anovulation — pelvic inflammatory disease	4
Anovulation — cervical factors	4
Anovulation — endometriosis	2
Anovulation — ovarian cysts	3

they had been given 100 mg. of clomiphene for five days. Eleven abortions took place in patients who had received clomiphene at the 50 mg. dosage level.

One group of patients did not become pregnant after administration with clomiphene citrate or clomiphene citrate and HCG therapy despite evidence of ovulation. It has been suggested that responsibility for the failure of conception lies with the antiestrogenic effect of clomiphene citrate. This situation may be corrected by the administration of small dosages of estrogen. We have tried this in approximately 20 patients and have failed to have a favorable outcome.

All the newborns were evaluated by a pediatrician looking in particular for congenital malformations; however, these were found in only two newborns. One was the result of a clomiphene-pergonal-HCG pregnancy and exhibited a cleft palate and harelip. The other was the result of clomid induction which resulted in a twin pregnancy. One of the twins exhibited a mild meningocele. There were three twin pregnancies. One of the twin pregnancies occurred in the anovulatory group. The other two were in the amenorrhea-oligomenorrhea group. The reported incidence of multiple pregnancies with clomiphene citrate therapy has been reported by Goldfarb[5] *et al* at 12.5 per cent, and it has been reported higher by Jones and Jones[6] in the group of patients treated with clomiphene citrate because of the Stein-Leventhal syndrome. None of our patients with multiple pregnancies had the Stein-Leventhal syndrome. The incidence of multiple pregnancies in this study was 3.3 per cent.

Discussion

The mechanism of action of clomiphene citrate is still not entirely clear but it would appear the clomid displaces estrogen-binding at the level of the hypothalamus and pituitary. This in turn produces an increase in released gonadotropins. The increased gonadotropins act on the ovary and thus produce an increase in estrogen which in its turn triggers the ovulatory peak with resulting ovulation. At the ovarian level, clomid increases steroidogenesis and permits better utilization of HCG or LH. At times the action of

TABLE 16
Cycles of Aborted Pregnancies

	Cycle				
Dosage	I	II	III	IV	V
50 M.G.	3	4	3		1
100 M.G.	1			2	1
Total 15	4	4	3	2	2

*4 out of the 15 patients who aborted had husbands with oligospermia.

TABLE 17

Pregnancies And Subsequent Menstrual Patterns

	Total Patients	*Ovulated*	*Pregnant Patients*	*Regular Menses*	*Pregnancies Without Therapy*
GROUP I					
Amenorrhea oligomenorrhea	72	46	39	37	7
GROUP II					
Anovulatory cycles	107	65	46	44	8
Total	179	111	85	81	15
Per cent		62	47.5	95.3	17.6

TABLE 18

Precautions Prior to Institution of Induction of Ovulation Therapy

1. *Be thorough in the investigation of the infertile couple.*
2. Correct associated pathology prior to therapy.
3. A pelvic examination must be done before each course of therapy.
4. Be ready to exclude pregnancy prior to each course of therapy.
5. All patients with abnormal vaginal bleeding should be properly investigated.
6. Patients with history of ovarian cysts should be carefully monitored by frequent pelvic exams.
7. Contraindicated in patients with liver disease.

clomid incompletely stimulates development of follicles which do not mature. The addition of exogenous gonadotropins will cause follicular maturation and ovulation.[7]

Matthews and Cox[8] pointed out that a substantial number of patients following successful induction of ovulation and pregnancy will establish a regular menstrual pattern and future pregnancies without induction of ovulation. In our study, 17.6 per cent of patients became pregnant without need of further therapy. In group I, 37 of 39 patients established normal menstrual cycles and seven of the 39 who ovulated and became pregnant with induction of ovulation were able later on to become pregnant without therapy. Of the 107 patients in group II, eight out of 46 became pregnant later on without therapy and 44 of the 46 patients who became pregnant established normal cycles (Table 17).

When medical induction of ovulation is entertained, certain precautions must be observed. These precautions are listed in Table 18. Our experience with clomiphene, clomiphene-HCG, clomiphene-pergonal-HCG, is that this modality of treatment is relatively inexpensive, is void of significant side effects and the results are extremely rewarding. In an attempt to make a profile of the ideal patients for induction of ovulation with these methods on the basis of the analysis in these two groups of patients, one has the impression that the best candidate for induction of ovulation is the patient who is between the ages of 20 and 35, who has secondary amenorrhea or anovulatory cycles and who has an endometrial biopsy with an endometrium which is proliferative. Ideal patients were found to be the post-pill amenorrhea, the Stein-Leventhal group, and patients with hyposecretory endometrium. It would also seem that the more estrogen-stimulated is the endometrium, the more responsive is the patient to induction of ovulation. The multiplicity of infertility factors and the necessity of thoroughness in the investigation were found to be undisputable facts, as was the fact that a good number of patients will subsequently establish normal menstrual cycles and experience pregnancy without therapy.

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Medical Grand Rounds

From the West Virginia University Medical Center

Edited By
Raymond B. Weiss, M. D.
Associate Professor of Medicine

Controversy In Internal Medicine: Strict Versus Relaxed Therapy Of Diabetes Mellitus

Discussants: Shawn A. Chillag, M. D.; Phillip J. Peters, M. D.; And Margaret J. Albrink, M. D.

This is the first of a series of controversies in internal medicine that will be presented this academic year. Today's controversy is a discussion of the therapy of diabetes mellitus. This topic was argued in 1966 in *Controversy in Internal Medicine*, the book providing the inspiration for this paper.[1] Eleven years later the controversy continues unabated. Doctor Peters will be the advocate for the strict control argument. Doctor Chillag will be the advocate for the relaxed approach.

THE RELAXED APPROACH

Shawn A. Chillag, M. D., Fellow in Pulmonary Diseases.

The story of diabetes is one of the most dramatic human interest stories of this century. Figure 1 reviews the Joslin Clinic's 40-year experience with juvenile diabetics.[2] In the pre-insulin era nearly 75 per cent of diabetics died in ketoacidosis. Now 60 per cent die of vascular complications. Most physicians felt that with the introduction of insulin in the 1920's the problems of diabetes had been solved. But within 10 years it became apparent that this was not to be so, and herein developed the controversy. Should we be committed to a program of rigid control as Cahill, Etzwiller and Freinkel advocate, or is it an unnecessary and unsuccessful exercise?[3]

I advocate the relaxed approach, i.e., striving to keep diabetics free of troublesome symptoms with minimal interruption of their daily routines. I believe that rigorous efforts to normalize the blood glucose add nothing to the well-being or longevity of the diabetic and are an unnecessary, and perhaps harmful intrusion in a patient's day-to-day life. The major points I would like to make are that no current therapy can postpone or prevent the distressing vascular complications, as they are inherent to the disease, and that current insulin treatment cannot mimic normal metabolism or produce normal blood glucose concentrations.

Diabetes and Vascular Complications

Clinical studies extolling the virtues of control in altering the appearance of vascular complications are not scientifically acceptable. Knowles reviewed 85 of these studies and found a positive correlation between poor control and vascular complications in 50, a negative correlation in 25 and no correlation in 10.[4] In hardly half of these studies were sufficient data given for critique.

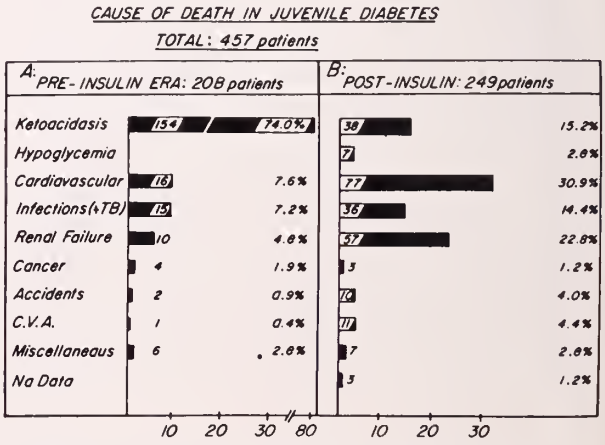

Figure 1. Mortality statistics for juvenile diabetes: Joslin Clinic experience. Reproduced with permission of the author and *Diabetes*.[2]

None was randomized, nearly all were retrospective, and in over three quarters there was unsatisfactory measurement of variables and endpoints. The measures of control that were chosen were highly questionable. Clearly no valid statement can be made from these data, pro or con.

A method for detecting, quantitating and monitoring the vascular complications is needed. Capillary basement membrane thickening (CBMT) may be an ideal study tool. CBMT, with its 98 per cent prevalence rate in adult diabetics and rarity in non-diabetics, may be the underlying lesion of diabetic vascular disease. Age and diabetes are the chief variables influencing CBMT. The degree of control of diabetes has not been proven to be a factor. Remarkably, 74 per cent of genetic prediabetic persons prior to the detection of hyperglycemia have CBMT,[5] though some authors disagree.[6] Hemoglobin A_{1c}, elevated in diabetics and serving as an indicator of degree of chronic control of diabetes, is not correlated with the degree of CBMT.[7] Thus hemoglobin A_{1c} and other markers of degree of control add little support for the benefits of tight control.

Non-diabetic hyperglycemia such as occurs with hemochromatosis and pancreatitis is only rarely associated with CBMT.[5] Animal models with spontaneous and alloxan-induced hyperglycemia do not develop typical diabetic renal or retinal lesions. CBMT is absent as well.[5] Only primary diabetics seem to have this marked propensity for typical diabetic angiopathy. These data strongly suggest that genetic or other factors, operative before and after hyperglycemia develops, cause the vascular disease in diabetes.

Diabetes is a multihormonal disorder characterized by excessive secretion of glucagon and probably other hormones, as well as by impaired insulin release. The resulting metabolic aberrations include not only hyperglycemia but also defects in protein and fat metabolism. It is not surprising that the mere addition of insulin fails to alter much except ketosis and hyperglycemia.

Control—"an exercise in mass delusion"

Many advocates of strict regulation of diabetes freely admit to the lack of firm evidence for its value. They base their case on hope rather than fact. But we must ask the question: if rigid therapy is no better, is it any worse? The answer is a resounding yes. What is this control?

Malone *et al* call good diabetic control "a study in mass delusion."[8] Control, as usually defined, is far removed from the normal metabolic response to feeding and fasting. Most authors use a fasting plasma glucose of less than 120-130 mg per cent, a postprandial plasma glucose of less than 160 mg per cent, and freedom from glycosuria as the parameters of good control. Current therapy does not regularly achieve such control. Even frequent injections of regular insulin cannot mimic the minute-to-minute response of the normal pancreas.

Monitoring of control on a day-to-day basis is impossible. The most practical day-to-day measure of control has been home recording of urine testing. But Malone *et al* found in a summer camp situation (one which should produce maximum patient compliance) that only three-quarters of the urine tests were performed. There were 60 campers; 14 who had good control on the basis of fasting blood sugars were in poor control on the basis of 24-hour urine glucose concentrations. Urine testing by campers and laboratory technicians agreed in only 50 per cent of the tests and only one-fourth of the campers complied with 24-hour urine collection.[8] Molnar continuously monitored blood glucose of stable diabetics in the hospital under constant experimental conditions.[9] The marked within-day and between-day variation found by him casts doubt on the value of a single daily blood glucose.

Compliance is a monumental problem in medicine. There are few studies of compliance in diabetics, but the problems must be great. The few existing studies show no relationship between degree of compliance and degree of diabetic control.[10]

The advocates of strict regulation would have us cajole our patients into conforming with unachievable, burdensome and unproven standards. Diet restriction and frequent injection of insulin limit freedom. Children so treated are set aside. Like most physicians, I would pursue close control if there were no higher cost, but there is real danger in attempting to maintain a normal blood glucose. Hypoglycemia can cause hemiplegia, death and mental dulling. In a study in a well-staffed camp with 116 campers, there were 648 hypoglycemic episodes in 3,050 camp days. Twenty-four hour urine glucose concentrations were measured daily and urine reductions were checked four times daily. Blood glucose was measured biweekly. Food was weighed. While success was achieved in that the subjects did not spill glucose and had normal fasting sugars, 11 insulin reactions occurred daily among the 116 campers.[11] The price of what we define as control can indeed be exorbitant and the inevitable hypoglycemia devastating.

I would not be the first to suggest that like Procrustes, the legendary villain of ancient Greece

who stretched or cut off the legs of his victims in order to fit them to his bed, the advocates of tight control recommend fitting patients into rigid, preconceived patterns of control for which neither the effectiveness nor the safety has been proven.[10]

Summary

So what does it all mean? The relaxed approach to diabetic management is one that frees the patient from polyuria, polydipsia, polyphagia, ketoacidosis and spmptomatic hyperosmolarity while disturbing daily routine as little as possible. There is but slim evidence to support a cause and effect relationship of hyperglycemia and vascular disease, and there is mounting evidence that vascular complications may occur independently of hyperglycemia.

The physician can do a great deal in improving the quality of life by using a relaxed approach. In concert with the patient the physician must define those goals that are achievable for that individual. Compromise must be accepted. and the physician should accept this compromise gracefully. The zealots of tight control are committed to a form of therapy that is unsupported scientifically. It can be unnecessarily harmful and should not be pursued.

THE ARGUMENT FOR STRICT CONTROL

Phillip J. Peters, M. D., Fellow in Endocrinology and Metabolism.

I am intrigued by my colleague's plea for liberal control of diabetes. However, I too can find an analogy in ancient Greek mythology. The school of thought which advocates loose control should best be termed the Daedalian-Icarian School. Daedalus was a .mythical Greek who made wings of wax and feathers to allow him and his son Icarus to escape their imprisonment. Icarus flew too close to the sun, however, and the wax melted causing the flimsy wings to fall apart, and he fell to his death. The liberal school is sending all diabetics through life on rather slipshod wings.

Only the naive can say that the issue we are debating today has clear-cut and definite answers. It does not even have clear questions, so how can it have clear answers?

There is no way to prove categorically that strict diabetic management is essential. What I intend to do is to take several of the complications of diabetes mellitus and to examine briefly what is known about them and then to offer some evidence that strict diabetic control prevents or improves these conditions. The conditions I wish to discuss are: neuropathy, vascular disease, retinopathy, nephropathy, infection and fetal wastage.

Neuropathy

In the 1960's diabetic neuropathy was attributed to microvascular disease involving the vasa nervorum. However, more recent studies have shown that diabetic neuropathy is characterized structurally by segmental demyelination as a result of damage to the Schwann cells surrounding the peripheral nerve fibers. The Schwann cells that surround nonmyelinated axons in the autonomic nervous system are also affected in a similar manner.

These changes have been linked metabolically to a shift of glucose metabolism to the polyol pathway in diabetes.[12] Hyperglycemia leads to an accumulation of the polyol sorbitol which in turn is converted into fructose (Figure 2). The sorbitol and fructose do not cross cell membranes well and therefore accumulate, causing an increased intracellular osmotic load with consequent increased intracellular water content and osmotic damage to the cell. In experimental diabetes in animals sorbitol and fructose levels of nerves become elevated, the water content of the nerve also increases, and nerve conduction velocity decreases.[12] Control of blood sugar with insulin results in correction of all these abnormalities.

Winegrad and colleagues[12] have linked a deficiency of nerve myoinositol to neuropathy in experimental diabetes. The deficiency is related to hyperglycemia and perhaps to the increased activity of the polyol pathway, and it is corrected by administration of insulin or by dietary supplementation with myoinositol.[12] While an absolute causal role of hyperglycemia in diabetic neuropathy has not yet been established, the weight of evidence suggests that neuropathy is related to hyperglycemia and that close attention to blood sugar control may prevent or at least improve it.

Vascular Disease

Numerous studies have shown that diabetics have a markedly increased frequency of atherosclerotic peripheral vascular disease and premature coronary artery disease. Four principal

SORBITOL PATHWAY

1) Hyperglycemia —(Aldose / Reductase)→ Sorbitol

2) Sorbitol —(Sorbitol / Dehydrogenase)→ Fructose

Figure 2. The effect of hyperglycemia on the polyol pathway.

conditions have been implicated: (1) Hypertension, (2) Hyperlipidemia, (3) Increased blood coagulability, and (4) Activation of the polyol pathway in the arterial wall. The latter two may be directly related to diabetic control and will be briefly reviewed.

Increased blood coagulability:

There are several aspects of coagulation which are frequently abnormal in diabetics. These include increased platelet adhesiveness, a phenomenon that has been related to blood glucose concentration[13] and a decrease in fibrinolytic activity.[24] The increased coagulability in diabetics is a possible mechanism for the increased incidence of atherosclerotic phenomena and may be linked to the degree of hyperglycemia.

The polyol pathway and atherosclerosis:

The combination of hyperglycemia and hypoinsulinism has been shown by Winegrad to increase the formation of polyols in the inner arterial walls and thus increase susceptibility to formation of atheroma.[15] Because of the wide range of insulin responses in various types of diabetic patients, it is very hard to establish a concrete cause and effect sequence of events whereby hyperglycemia and reduced insulin lead to polyol formation and accelerated atherosclerosis. However, Winegrad's work as well as that of numerous other authors would certainly lend support to this concept.

We must then decide if improvement in hyperglycemia can reduce the incidence of accelerated atherosclerosis. Unfortunately to date, there has been no well-controlled (and I use the phrase well-controlled to refer to both the variables in the studies and the degree of diabetic control) group of diabetics studied with regard to prevention or regression of atherosclerosis. Even the University Group Diabetes Project (UGDP) did not achieve optimal control among most groups of their diabetics, perhaps accounting for the lack of clear-cut beneficial effect of insulin in adult-onset diabetics.[16]

Retinopathy

The eye diseases of diabetes include cataracts, glaucoma, refractive errors and retinopathy, but for the purpose of this discussion, I will confine myself to retinopathy. Diabetic retinopathy is among the four most common causes of legal blindness today. One in forty diabetics is legally blind and two in 1,000 diabetics become blind each year.

No direct mechanism has been worked out for diabetic retinopathy; however, it is believed to be a result of capillary closure and tissue hypoxia. No direct effect between increased blood sugar and diabetic retinopathy has been proven. A study by Job, however, showed improved diabetic control and a delay in the development of diabetic retinopathy in patients treated with divided daily insulin injections.[17]

Nephropathy

Diabetic nephropathy has been linked to basement membrane thickening in the glomerular capillaries. Recent studies strongly suggest that while there may be some genetically predetermined abnormality in the diabetic glomerular basement membrane, many of the changes are acquired by a hyperglycemia-induced mechanism. The reports of classical diabetic nephropathy in patients with acquired diabetes secondary to states of pancreatic insufficiency, such as chronic pancreatitis and pancreatectomy, certainly substantiate this viewpoint.[18] Additionally, the rapid development of early basement membrane changes consistent with diabetic nephropathy in normal kidneys transplanted to diabetic patients reinforces the theory that diabetic nephropathy is primarily an acquired condition and may well be related to hyperglycemia.[19] Mauer recently showed that diabetic nephropathy in alloxan-induced diabetic rats was reversible when the rats were treated with pancreatic islet cell transplants. He also showed that hypoinsulinemia may be a more important factor than the hyperglycemia in bringing about progression of the lesions.[19] Although it is difficult to extrapolate these results to humans, it would certainly seem reasonable to attempt good diabetic control and not to hestitate to initiate early insulin therapy.

Infection

It is still quite controversial whether or not non-ketoacidotic diabetics have a greater frequency of infection than do non-diabetics. Certain infections are definitely more common in diabetics. Among these are fungal infections such as candidiasis and phycomycosis; an increased incidence of other infections and tuberculosis is not proven but suggested. There have been numerous attempts to show a correlation between hyperglycemia and deficiencies in host defense mechanisms. Bagdade has shown a direct effect of increased blood glucose concentrations in diminishing phagocytic activity and an improvement of this abnormality with diminishing concentrations of blood glucose.[20] He has also shown in crossover studies that hyperglycemic diabetic serum decreases phagocytosis by non-diabetic leukocytes, and that non-diabetic serum improves phagocytosis by diabetic leukocytes. A decrease

in phagocytic activity in leukocytes working locally in the kidney may be secondary to hyperglycemia-induced hyperosmolarity in the medulla and may play a role in the pathogenesis of pyelonephritis and necrotizing renal pappilitis, renal diseases commonly found in diabetics.[20]

Fetal Loss

Pregnant diabetics have a greatly increased fetal loss. Even though modern obstetrical advances, enabling the reasonably accurate estimation of fetal maturity and subsequent early delivery, have reduced the perinatal mortality, it still remains much higher than for pregnancies of non-diabetic mothers. A study showing that the risk of fetal loss in diabetic mothers is directly related to the level of hyperglycemia[21] has led many centers to attempt strict diabetic control during pregancy with favorable results. If the mother is willing to tolerate the somewhat uncomfortable effects of occasional hypoglycemia, significantly improved fetal survival may be achieved. The only drawback is that it requires very close monitoring and frequent hospitalization for insulin adjustment.

Conclusion

The question before us is whether or not there is an indication for strict diabetic control. Not all patients are amenable to close control and the physician must individualize his therapy and expectations for each patient. However, I believe that every diabetic who is willing should be offered the opportunity for the best possible control. At present, the evidence in favor of strict diabetic control is not absolutely conclusive, but it is growing. In view of the low risk associated with rational, strict diabetic control and its possible, even probable, benefits in preventing diabetic complications, the burden of proof rests on those who advocate loose control. When a case has not been conclusively made for loose control, we are obligated to pursue the course of action with the fewest potential risks for the patient—that is, strict diabetic control.

A SUMMING UP

Margaret J. Albrink, M. D., Professor of Medicine, Division of Endocrinology and Metabolism.

Much of the debate surrounding ideal treatment for diabetes stems from another debate, that concerning the etiology of the disease. Growing evidence supports the concept that juvenile-onset and adult-onset types are indeed two different diseases.[22] They differ in etiology, outcome and very likely in mode of optimum treatment. Although there is much overlap, in general the juvenile-onset type characteristically has an onset before age 40; patients are thin, ketosis-prone, insulin-dependent, and a family history of diabetes is sparse. A genetic background may predispose to pancreatropic virus infection. Small-vessel disease is almost inevitable with time, diabetic nephropathy being its most dreaded manifestation and the commonest cause of death.

Adult-onset diabetes, constituting about 80 per cent of all diabetes, is quite another story. Patients are usually middle-aged, have a strong family history of diabetes, do not require insulin to avoid ketoacidosis, and share a cluster of metabolic traits: obesity, insulin resistance, hyperinsulinemia and hypertriglyceridemia. Insulin response to a glucose load, while delayed, may be excessive and would be sufficient to maintain normoglycemia were it not for the insulin resistance. Large-vessel disease, usually coronary artery disease, is the commonest cause of death and is twice as common as in non-diabetics of the same sex and age.

The juvenile type is characterized by insulin lack, the adult-onset type by insulin resistance. It stands to reason that ideal therapy for the juvenile type would be insulin replacement. For the obese adult-onset type, therapy should be aimed at reversing the insulin resistance, a phenomenon related in part to decreased numbers of insulin receptors in tissues of the obese. Here, insulin therapy is not the answer. Indeed, because of the inverse relationship between plasma insulin concentration and number of insulin receptors,[23] insulin administration probably causes even more insulin resistance. Moreover, since tissues differ in their degrees of insulin resistance, insulin in a dose sufficient to achieve normoglycemia will probably deliver too much insulin to the less insulin-resistant tissues. Adipose tissue is a case in point. To expect an obese person to lose weight while receiving sufficient insulin to maintain normoglycemia is an exercise in futility. It is not surprising that insulin therapy caused weight gain and did not prevent large-vessel disease in adult-onset diabteics in the UGDP study.[16]

A method is available for reversing the insulin resistance and related metabolic abnormalities: weight reduction.[24] Long-range hypocaloric diet aided by exercise will often restore normoglycemia by correction of the insulin-resistant state.

A great unresolved issue is whether insulin administration to the obese diabetic is ever indicated except for treatment of hyperosmolar coma or diabetic acidosis. Information regarding insulin resistance suggests that renewed and intensified efforts should be directed instead toward

achieving weight loss. The only conclusion that can be drawn with certainty, however, is that where there is controversy, there is insufficient information with which to resolve the controversy.

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A message from . . .

The President

ARE YOU RIPE OR GREEN?

CME, or Continuing Medical Education, is a much discussed subject in medical publications and meetings these days. Simply stated, it means keeping up with advances in diagnostic and therapeutic techniques and applying this knowledge to your practice. Most physicians feel this is commendable and should be done. The hot debates arise over compulsory or required CME versus voluntary education.

Some states prescribe a stated number of hours of CME to qualify for re-licensure or membership in medical associations; and many specialty boards are considering the same route for re-certification. The Family Practice group was the first to initiate required CME and it has succeeded admirably.

I have heard it said that if organized medicine doesn't mandate CME then Big Brother, the Federal Boys, will do it. The entire problem will require study and thoughtful consideration, and our Medical Association's House of Delegates has set such a study in motion. In West Virginia, we have a wide variety of postgraduate education courses; and opportunities for learning are offered by local societies, hospitals, and the State Association.

Let us, as a profession, continue to exhibit integrity and "keep learning." We hear a lot about good apples and bad apples in medicine, which reminds me of a poem:

So long as you know
You are green
You grow.

But when you think
You are ripe
Then you begin
To get rotten.

I'm still green, honestly. Are you?

John J. Mahood

JOHN J. MAHOOD, M. D., *President*

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EDITORIALS

THREATS?

The day following the November election, a certain crowing was heard from the direction of Labor supporters of the Kennedy-Corman national health insurance bill. Flushed with victory, their message was, "Now we have you where we want you and we are going to jam our bill down your throats."

Such talk is irresponsible and dangerous. It is irresponsible because it shows a total lack of awareness of the cataclysmic results possible for the country were such a course to be pursued. It is dangerous because they probably have the power to do exactly what they claim.

Doctors are good citizens. Their work requires a discipline and a deep respect for rules. They obey traffic laws as well as most, pay taxes better and with fewer complaints than others. They revere the Law and our political system. And they have an abiding sense of patriotism. They also have a sense of dignity and a conviction that they know how to practice medicine better than any junto of labor leaders and their hired political guns. Moreover, their sense of responsibility about Medicine requires them to be uncompromising in any matter limiting their ability to provide the best medical care of which they are capable.

It would be a serious error to assume that doctors will passively accept any ultimata from such as these. Were they to accept this yoke, they would fate their patients to a future of mediocre medical care. Medicine would rapidly degenerate into oil painting by-the-number—These symptoms can be studied using these tests.... This diagnosis you can treat with these drugs.... That diagnosis must be referred to one of these doctors at that hospital. . . . At this hospital the following tests may be done. . . . These conditions may be taken to surgery after the following requirements are met. . . . The following ancillary services and only those will be made available. . . . Any stay beyond *X* days will be justified and explained to the following review committees. . . .

What happens if doctors refuse to cooperate in a scheme they find medically unsound and professionally degrading? How many or what percentage of practicing doctors refusing to cooperate would it take to bring about a national catastrophe of immeasurable proportions? Perhaps a union hierarchy such as the Teamster leadership could answer the latter question. They play with such concepts. Their efforts have in the past brought about comparable situations wherein it was demonstrated that the entire nation could be brought to its knees by a relative handful of men.

What is the response of government if doctors balk at working under a system forced upon them? Seize the assets of the AMA and assets of state and local societies as well? Arrest and imprison medical leaders nationwide? How long would the necessary legal process drag on to conclude successfully efforts such as these? How long could the nation tolerate such a contest? Who among our political leaders is anxious to risk such a confrontation? What would be the long-term outlook for a system put into operation through such conditions of duress applied to its principal functionaries?

To say the least, these are repugnant thoughts. But someone had better think them. Someone had best consider the obvious fact that the cooperation of doctors is needed to make any health care system function. Someone should hear the message, "Don't push us too far."

Various forces in Washington are jumping with glee at the thought that they have found the Achilles heel at which to attack private medicine: rising costs.

If you recall your Homer, the heel was the one part of the body in which the Greek hero was vulnerable.

COST EXPLOITATION

No longer can Washington accuse physicians of being 50,000 short in numbers. It cannot gainsay the peerless competence of American medicine. It cannot deny what the polls show: that most Americans are satisfied with the quality and availability of their care.

But rising costs—sensationalized by charges of Medicaid fraud on the part of a tiny minority of doctors—are being exploited as an excuse for an all-out move against our profession and its freedom.

Rate-setting for medical services has been suggested by the Democratic platform and by President Jimmy Carter. A move to make it mandatory in all states is likely to be made when the Health Planning Act comes up for extension in 1977—provided that law survives the joint suit of North Carolina and the American Medical Association.

Yet, on the cost issue, too, physicians are generally invulnerable—and this is contrary to the thinking of some politicians.

The climb in costs is largely due to impersonal factors that far transcend the personal ability of health-care providers to control them.

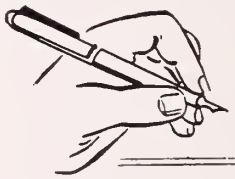
These factors include the growth and expansion of clinical competence and technology, the growth of health insurance and its incentives to better care, the relentless surge in professional liability premiums. They also include greater longevity (and thus a greater incidence of chronic illness), steady inflation, and the network of administrative and procedural expenses engendered by Federal involvement in care.

Further aggravating the cost problem is the absence of any quantitative limit on what medicine is supposed to do with its technology, or expected to do. Sophisticated surgery that may stretch life by a few years is unavoidably expensive, and that expense has to be reckoned with if life is to be so stretched.

Obviously, the Topsy-like growth in the demand for, and capabilities of, medical care since World War II has caused overlaps, imbalances, and disarrangements—particularly at the institutional level—and these should be relieved by voluntary planning. The AMA's blue-ribbon National Commission on the Cost of Medical Care, representing many walks of life (including government), is seeking to place the cost problem in its true perspective, so that practical remedies can be offered.

But there is no valid reason for government to try playing the role of marksman Paris and shoot an arrow at private medicine's heel.

Let us bring the real facts of medical costs to our state and communities in every way we can. The people must know that if government tries to do the worst to us, we can no longer do the best for them.—*Guest editorial from the American Medical Association.*



Our Readers Speak

Needs Biographical Data

For a biography of Dr. Alton Ochsner of Ochsner Clinic, New Orleans, opinions, evaluations, anecdotes, reminiscences, photos are needed. Photos will be carefully handled and returned. All material gratefully received by:

Ira Harkey, Ph. D.
401 Metairie Road, Apt. 706
Metairie, Louisiana 70005

Agrees with 'Generic' Editorial

In the January issue of the West Virginia Medical Journal you had an article on the editorial page regarding "generic names." I think this article expresses better than any I have ever read the attitude of practicing physicians regarding some of the medical literature which is being published today. Why is it not possible for all authors who mention drugs to mention them by their generic names and put their trade names in parenthesis immediately following?

I agree that it is very difficult to look up in some of our books the generic names of certain drugs. Certainly the P.D.R. does not have them in any great detail. The best book I have found for this is the American Drug Index, but again, there are times when even it is deficient. It certainly would make the articles we read more understandable and more interesting if the above were carried out.

George P. Heffner, M. D.
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GENERAL NEWS

WVU, Pennsylvania Physicians Annual Meeting Speakers

Dr. John J. Rick of Morgantown and Dr. Thomas W. Langfitt of Philadelphia have accepted invitations to present papers during the 110th Annual Meeting of the West Virginia State Medical Association, it was announced by Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee.

John J. Rick, M. D.

Thomas W. Langfitt, M. D.

The Annual Meeting will be held at The Greenbrier in White Sulphur Springs, August 24-27.

Doctors Rick and Langfitt will speak at the first general scientific session on Thursday morning, August 25, which will be devoted to a "Symposium on Management of the Multiple Trauma Patient."

John J. Rick, M. D.

Doctor Rick, Assistant Professor of Anesthesiology and Associate Director of the Intensive Care Unit at the West Virginia University School of Medicine, will speak on "Respiratory Problems Associated with the Multiple Trauma Patient."

A native of Chicago, he came to WVU in 1975 from Coldwater, Michigan, where he had been located since 1953. In Coldwater, he was in the private practice of internal medicine and became Medical Director and Director of the Intensive Care Unit and the Coronary Care Unit at the Community Health Center of Branch County there in 1974-75.

Doctor Rick is an associate member of the American College of Physicians, an associate member of the American College of Cardiology, and a member of the American Society of Internal Medicine and the Society of Critical Care Medicine.

He is Medical Advisor to Regions VI and VII of the West Virginia Emergency Medical Service System.

Doctor Rick was graduated from DePauw University, where he was a member of Phi Beta Kappa, and received his M. D. degree in 1952 from the University of Michigan.

He served a rotating internship at Riverside Hospital in Toledo, Ohio, and residencies in internal medicine at Henry Ford Hospital in Detroit and University Hospital in Ann Arbor, Michigan. He was a Fellow in Critical Care Medicine in 1973-74 at the University of Pittsburgh.

Thomas W. Langfitt, M. D.

Doctor Langfitt is Charles H. Frazier Professor and Chairman, Division of Neurosurgery, at the University of Pennsylvania. His topic will be "Neurosurgical Management in the Patient with Multiple Trauma."

Doctor Langfitt is a native of Clarksburg. Certified by the American Board of Neurological Surgery in 1963, he also is Vice President for Health Affairs at the University of Pennsylvania.

He is a member of the Editorial Board of the *Journal of Neurosurgery.*

Since 1971, Doctor Langfitt has served on the Advisory committees for four International Symposiums on Cerebral Blood Flow and three International Symposiums on Intracranial Pressure. In this country, he has been Visiting Professor of Neurosurgery at some 18 hospitals, colleges and universities; and abroad, at the universities of Helsinki, Krakow, Glasgow, Mainz and Heidelberg.

He was Distinguished Guest at the meeting of the Canadian Neuroscience Society in 1972, a Stoneburner Lecturer at the Commonwealth University of Virginia in Richmond in 1974, and Honored Lecturer at the Third International Symposium on Intracranial Pressure at Groningen, Netherlands, in 1976.

Doctor Langfitt has held a wide variety of national committee appointments, including those as Annual Meeting Chairman for the American Association of Neurological Surgeons in 1974-75, and as a member of the Task Force on Residency Training in Neurosurgery, American Board of Neurological Surgery, also in 1974-75.

He was graduated from Princeton University and received his M. D. degree in 1953 from the Johns Hopkins University School of Medicine. He served

an internship in general surgery at Johns Hopkins Hospital and a residency in general surgery at Vanderbilt University Hospital, followed by residencies in urology and neurosurgery at Johns Hopkins Hospital.

Doctor Langfitt is the author or co-author of more than 135 scientific articles and papers.

Other Program Plans

Other prominent physicians also have accepted invitations to present papers at the general session on Thursday. Still others will speak Friday and Saturday mornings in subject areas including psychiatry, electrocardiography, management of gonorrhea patients, and dermatology. A nonscientific presentation on financial planning for physicians and a workshop for component medical society officers also are planned.

Doctor Budd Honor Guest

It was announced previously that Dr. John H. Budd of Cleveland had accepted an invitation to speak at the first session of the House of Delegates on Wednesday afternoon, August 24. Doctor Budd will be installed as President of the American Medical Association during the annual meeting in San Francisco in June.

Business Meeting Schedule

The Medical Association's Council will hold its regular pre-convention meeting on Wednesday morning. The first session of the House on Wednesday afternoon will be followed on Saturday, August 27, by the second and final House session.

Sections and societies affiliated with the Medical Association again are expected to schedule breakfast and other scientific and business meetings on Friday and Saturday.

Serving with Doctor Bell on the Program Committee are Drs. N. LeRoy Lapp of Morgantown, Tony C. Majestro and Ralph S. Smith, Jr., of Charleston, Joseph A. Smith of Dunbar and Charles E. Turner of Huntington.

Council Votes To Establish New Legislative Services

The State Medical Association's Council took new steps at a January 16 meeting in Charleston to establish year-around consultant services for the Association in the general area of legislative matters.

Specifically, the Council authorized the Executive Committee to obtain such a consultant, and set an annual budget of up to $20,000 to cover all costs of such services. Work was under way toward implementing this directive as *The Journal* went to press.

In other January 16 action, the Council:

—Received a Treasurer's Report showing that the Association finished calendar, and fiscal, 1976 with a general operating budget of $54,799.29 exclusive of 1975 carry-over funds.

—Elected to honorary membership in the Association Drs. Genevieve G. Dutton of White Sulphur Springs, Joseph Gilman of Clarksburg, Harry A. Carney and Peter A. Haley of Charleston, Wilda S. Joseph of Wheeling and Robert McCune, Jr., of Grafton.

—Approved reissuance of a component society charter to the Hancock Medical Society, subject to further action by the House of Delegates at the Association's Annual Meeting in August at The Greenbrier.

—Approved a $1,750 allocation to the Auxiliary to the Association for its 1977 Annual Meeting; and $300 for Medical Golf Tournament prizes, with the usual stipulation that the golf allocation be reimbursed from registration fees imposed for the Tournament again to be held as part of the Annual Meeting.

—Appointed as "nucleus" members of the West Virginia Medical Political Action Committee (WESPAC) Board of Directors Drs. Stephen D. Ward of Wheeling, First Congressional District; N. B. Groves, Martinsburg, Second District; Joseph T. Skaggs of Charleston, Third District, and Frank J. Holroyd, Princeton, Fourth District. The Council also appointed as ex officio Board Members Dr. Jack Leckie of Huntington, the Chairman of the Council, as a representative of the Council; and Mr. Charles R. Lewis, the Association's Executive Secretary.

—Directed preparation of a letter to the American Medical Association explaining in further terms the Council's opposition to an American Medical Association proposal for a direct dues billing of AMA members, separate and apart from billings by component societies for local and State Medical Association dues.

—Instructed Dr. John J. Mahood of Bluefield, the Association's President, to recommend to Gov. Jay Rockefeller the appointment of a qualified psychiatrist as Commissioner of the West Virginia Department of Mental Health.

A 1976 legislative enactment gives the Governor the option of appointing a psychiatrist or a physician to the post—or an administrator with stipulated business management and other background. Dr. Mildred Mitchell-Bateman, a psychiatrist who has headed the Department for a number of years, told Council she would be leaving the position and thanked members and the Association for support and help during her tenure.

Much of the Council's time was given to reviewing legislative proposals expected to be offered and considered during the regular 1977 legislative session, including those in such areas as professional liability; certificate of need; mental health; a State Department of Health budget request for funds for a new building, and health maintenance organizations.

Mid-Winter Conference Goes On Despite Wintry Blasts

The Tenth Mid-Winter Clinical Conference, although buffeted by winter storms, was held as scheduled January 28-30 at the Daniel Boone Hotel in Charleston.

Total registration was 138, including 118 physicians. The 1976 total registration was 201, with 157 physicians in attendance.

The conference Program Committee was pleased with this year's attendance in view of the frigid temperatures and snow which were responsible for the cancellation of the Friday (January 28) evening physicians' session and the public session. Most participants remained throughout the conference, with approximately 100 persons attending the Saturday evening dinner session.

In addition to the 118 physicians, this year's registration also included six residents, three nurses, one physician's assistant, four medical students and six other health-related participants.

The cancelled Friday evening sessions included a program for physicians planned by the West Virginia Medical Institute, Inc. and a program on sports medicine planned for the public. A session on sports medicine for physicians was held Friday afternoon.

The conference agenda also included a variety of other topics covering, in general, stomach and lung ailments, and tomography. There also was a non-clinical presentation on the West Virginia Health Systems Agency.

Dr. James R. Hodge, Akron (Ohio) psychiatrist, a scheduled out-of-state speaker, was unable to attend the conference because of the weather. His paper, however, is being reviewed for publication in *The Journal.*

Dr. Robert W. Coon of Huntington, accompanied by Mrs. Coon, was the guest speaker for the Saturday evening dinner session. Doctor Coon, Vice President for Health Services and Dean of the Marshall University Medical School, discussed the progress of the developing medical school. Dr. Kenneth G. MacDonald of Charleston, Treasurer of the State Medical Association, served as toastmaster.

The conference, which began 10 years ago as a small meeting on chest diseases, has grown rapidly as a major continuing education event for the State's practicing physicians. It is sponsored by the State Medical Association and other health organizations.

Serving on the Program Committee are Drs. Ralph H. Nestmann and Joseph T. Skaggs of Charleston, Co-Chairmen, and Drs. William O. McMillan, Jr., Charleston, and C. Carl Tully, South Charleston. The Program Committee expressed appreciation to both speakers and participants for attending the conference despite the severe weather conditions.

Weirton General Hospital Holds Drug Interaction Program

A continuing medical education program on the "Interaction of Drugs" was held recently at Weirton General Hospital. The program for physicians, nurses and allied health personnel was sponsored by the hospital's Pharmacy and Therapeutic Committee, of which Dr. Richard E. Flood is Chairman.

The faculty consisting of staff members from the West Virginia University School of Medicine, included David J. Smith, Ph. D., Associate Professor of Anesthesia and Pharmacology; Charles R. Craig, Ph. D., Professor of Pharmacology; John A. Thomas, Ph. D., Professor of Pharmacology; and Pedro R. Urquilla, M. D., Associate Professor of Pharmacology.

The Tenth Mid-Winter Clinical Conference was held January 28-30 in Charleston at the Daniel Boone Hotel. Making final preparations for the Friday afternoon, January 28, physicians' session on sports medicine, on the left, are some of the speakers, Drs. K. Douglas Bowers, Jr., Morgantown; Tony C. Majestro, Charleston; Robert W. Lowe, Huntington; Herbert E. Warden, Morgantown, and Mr. John C. Spiker, Morgantown, WVU trainer (from left). Shown in the right photo are Dr. John J. Mahood of Bluefield (second from left), President of the State Medical Association, with the physicians participating in the Saturday morning session, a symposium on "The Medical and Surgical Management of Upper Gastrointestinal Bleeding." They are (from left) Drs. William O. McMillan, Jr., of Charleston, substituting for Dr. Thomas E. Chvasta of Wheeling, who was unable to attend because of the weather; Johnsey L. Leef, Jr., Charleston; George J. Hill, Huntington; and James P. Boland, Charleston, who presided. Doctor McMillan is a member of the Mid-Winter Clinical Conference Program Committee.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. N. LeRoy Lapp, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Mar. 2-4	Selected Topics in Internal Medicine Cosponsored by American College of Physicians	Morgantown
Mar. 12	High-Risk Pregnancy Conference	Charleston
Mar. 24	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Mar. 25	Fourth Annual Newborn Day	Charleston
Mar. 25, 26	Cancer Teaching Day—Human Cervical Cancer	Morgantown
Apr. 1-2	Psychosomatic Medicine	Charleston
Apr. 2	Cardiology Teaching Day	Parkersburg
Apr. 15-17	Annual Scientific Assembly, Department of Family Practice	Morgantown
Apr. 16	Surgery Day	Wheeling
Apr. 22	Third Annual ENT Teaching Day	Morgantown
Apr. 22	Jackson General Hospital Visiting Physician Program	Ripley
Apr. 28	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Apr. 29, 30	Present and Future of Microbiology—The Role of Automation	Morgantown
May 7	Medicine Day—Coronary Artery Disease	Wheeling
May 27	Jackson General Hospital Visiting Physician Program	Ripley

American Heart Association Plans 'Great Teachers' Conference

The "Great Teachers" Conference, a new concept in continuing education for practicing physicians, will be sponsored by the American Heart Association this spring and fall.

The East Coast conference will be held May 9-11 at The Greenbrier in White Sulphur Springs, with the West Coast conference scheduled for October 17-19 at the Ahwahnee Hotel in Yosemite National Park, California.

Each conference will utilize small group sessions to allow for informal interchange between the participant and the "Great Teacher." There will be a limit of 80 registrants, with all registration by advance registration only.

The faculty will include Drs. J. Michael Criley, Professor of Medicine and Radiology, UCLA, and Chief, Division of Cardiology, Harbor General Hospital, Torrance, California; Donald C. Harrison, William G. Irwin Professor of Cardiology, Professor of Medicine, and Chief, Division of Cardiology, Stanford University, Palo Alto, California; Robert A. O'Rourke, Professor of Medicine and Chief, Division of Cardiology, University of Texas Health Science Center at San Antonio, and Past Teaching Scholar of the American Heart Association; Joseph K. Perloff, Professor of Medicine and Pediatrics, and Chief, Cardiovascular Section, University of Pennsylvania School of Medicine, Philadelphia;

Melvin Scheinman, Associate Professor of Medicine and Teaching Scholar of the American Heart Association, University of California at San Francisco; Pravin M. Shah, Professor of Medicine and Associate Professor of Pediatrics, University of Rochester (New York) School of Medicine, and Past Teaching Scholar of the American Heart Association; and Arnold Weissler, Professor and Chairman, Department of Internal Medicine, Wayne State University, Detroit; and Chief of Medicine, Harper Hospital, Detroit.

The registration fee will be $150 for members of the American Heart Association Scientific Councils and $200 for non-members.

The registration deadline for the East Coast conference is April 11.

Registrations should be sent to: Administrator: Post Graduate Programs, American Heart Association, Inc., 7320 Greenville Avenue, Dallas, Texas 75231.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal,* Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication. *Meanwhile, please see a review of the book, "Plagues and Peoples," on page xx of this issue of The Journal.*— Editor.

Current Pediatric Diagnosis and Treatment, 4th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D.; and Donough O'Brien, M. D. 1,053 Pages. Illustrated. Price $15.00. Lange Medical Publications, Los Altos, California 94022. 1976.

Current Obstetric & Gynecologic Diagnosis Treatment, by Ralph C. Benson, M. D., and associate authors. 912 pages. Price $16.00. Lange Medical Publications, Los Altos, California 94022. 1976.

The Medical School Admission Adviser, by Marvin Fogel, M. D., and Mort Walker, M. D. 264 pages. Price $5.45. Hawthorn Books, Inc., New York, New York. 1976.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

Occupational Lung Diseases by William Keith C. Morgan, M.D., and Anthony Seaton, M. D. 391 pages. Price $18.00. W. B. Saunders Company, Philadelphia, Pennsylvania. 1975.

Maternal-Fetal Monitoring Conference March 12

A conference on "Maternal-Fetal Monitoring" will be held on March 12 at the Ramada Inn in South Charleston under the sponsorship of the Charleston Area Medical Center, Charleston Division/West Virginia University Medical Center, and Roche Medical Electronics, Inc.

John W. Greene, Jr., M. D.

Charles A. White, M. D.

The conference will begin with registration at 8 a. m., followed by a welcome and introduction by Dr. Thomas W. Mou, Dean of the Charleston Division/WVU Medical Center.

Dr. Thomas R. Poole, Charleston obstetrician and gynecologist and Clinical Associate Professor, Charleston Division/WVU Medical Center, will be moderator for the morning session. The speakers and their topics will be "Biophysical Aspects of Monitoring"— Bruce K. Young, M. D., Associate Professor, New York University School of Medicine; and Director of Obstetrical Service, Bellevue Hos-

In the left photo, Dr. Adla Adi of Charleston (second from left) is shown talking with some of the physicians participating in the Saturday afternoon session on "Acute Thoracic Problems" during the Tenth Mid-Winter Clinical Conference. They are Drs. Dominic J. Gaziano, Charleston; Harry K. Tweel, Huntington, who presided; and Walter J. O'Donohue, Richmond, Virginia (from left). Not shown is Dr. R. Thomas Linger of Charleston. Shown in the right photo at the speaker's table following the Saturday evening dinner session are, from left, Mrs. Robert W. Coon, Huntington; Mrs. John J. Mahood, Bluefield; Mrs. Kenneth G. MacDonald, Charleston; Doctor Coon, the speaker; Doctor Mahood, President of the State Medical Association, and Doctor MacDonald, Treasurer of the State Medical Association, who served as toastmaster.

pital Center, New York City; "Nursing Aspects of Maternal-Fetal Monitoring"—Rita Morris, R. N., Supervisor of Obstetrics and Newborn Nursery, Charleston Area Medical Center, Memorial Division;

"Maternal-Fetal Intensive Care in a Community Hospital"— Narinder N. Sehgal, M. D., Associate Professor and Director, Obstetrics and Gynecology, Charleston Division/WVU; and "High-Risk Pregnancy"—John W. Greene, Jr., M. D., Professor and Chairman, Obstetrics and Gynecology, University of Kentucky Medical Center, Lexington.

Dr. Ward W. Maxson, Charleston obstetrician and gynecologist and Clinical Associate Professor, Charleston Division/WVU, will moderate the afternoon session. The speakers and their topics will include "Intrapartum Management of the High-Risk Mother"—Doctor Young; "Biochemical Aspects of Monitoring"—Doctor Greene; and "Diagnostic Amniocentesis"—Charles A. White, M. D., Professor and Chairman, Department of Obstetrics and Gynecology, WVU Medical Center, Morgantown.

There will be panel discussion and questions and answers before adjournment at 5 P. M.

A reception will be held on the evening prior to the conference, Friday, March 11, at 7:30 in Conference Room "D" at the Ramada Inn.

This program meets the criteria for 6 hours of Category 1 credit toward the American Medical Association Physician's Recognition Award.

The registration fee will be $20 for physicians and $10 for nurses, with no charge for residents and students. Advance registration is requested. Mail registration and fees to: Conference Coordinator, Charleston Division/WVU Medical Center, P. O. Box 2867, Charleston 25330 (phone (304) 348-7617). Checks should be payable to: WVU Foundation, Inc.

Dr. Thomas W. Mou of Charleston, left, who presided at the Sunday morning session during the Tenth Mid-Winter Clinical Conference, is shown with one of the speakers, Dr. John A. Goree of Durham, North Carolina. Doctor Goree spoke on "Some Practical Aspects of Computed Tomography."

Ophthalmology - Otolaryngology Spring Meeting In April

The National Spring Meeting of The West Virginia Academy of Ophthalmology and Otolaryngology will be held April 24 - 27 at The Greenbrier in White Sulphur Springs.

Among those speaking during the ophthalmology program will be Drs. Stuart I. Brown, Professor and Chairman, University of Pittsburgh Eye and Ear

Stuart I. Brown, M. D.

George W. Weinstein, M. D.

Hospital; and George W. Weinstein, Professor and Head of the Division of Ophthalmology, The University of Texas Health Science Center at San Antonio.

Other ophthalmology speakers will include Drs. S. Arthur Boruchoff of Boston, Richard H. Keates, Columbus, Ohio; and Bruce E. Spivey, San Francisco.

Speakers for the otolaryngology program will include Drs. James A. Crabtree of Los Angeles; Alan M. Nahum, San Diego; Fred D. Owens, Dallas; and Paul H. Ward, Los Angeles.

Dr. Richard D. Richmond of Beckley is Academy President.

Hotel reservations should be made directly with The Greenbrier. Checks for the registration fee of $175 should be made payable to The West Virginia Academy of Ophthalmology and Otolaryngology and addressed to Dr. J. Elliott Blaydes, The Blaydes Clinic, Corner of Frederick and Woodland Avenue, Bluefield 24701.

State Physicians Certified

Three State physicians who recently have been certified by their national specialty organizations have been reported to *The Journal.*

Drs. Merrill F. Wymer and Ronald K. Stupar, both of Wheeling, have been certified as Diplomates of the American Board of Nuclear Medicine.

Dr. Prudencio Chu Corro of Beckley has been named a Fellow of the American College of Surgeons.

State AAFP Scientific Assembly In Morgantown In April

The 25th annual scientific assembly of the West Virginia Chapter, American Academy of Family Physicians, will be held April 22-24 at the Lakeview Inn and Country Club in Morgantown. Some 18 speakers will participate in the scientific program, which will be divided into the topic areas of "Office Orthopedics," "Problems of the Alcoholic," "Neurology," "Dermatology" and "Adolescent Problems."

Gunter R. Haase, M. D.

The speakers and their topics will be:

Friday Morning (April 22)

Office Orthopedics: "The Foot—Its Care and Management"—Richard C. Gardner, M. D., orthopedic surgeon, Gardner Orthopedic Diagnostic and Evaluation Center, Fort Myers, Florida; "Lower Extremity Problems in the Pediatric Patient"—Robert L. Ghiz, M. D., orthopedic surgeon, Charleston Area Medical Center; and "Injection of Joints and Periarticular Structures"—Paul D. Saville, M. D., Charleston, Clinical Professor of Medicine, Charleston Division, West Virginia University Medical Center.

Friday Afternoon

Problems of the Alcoholic: "The Alcohol Withdrawal Syndrome"—Frank A. Seixas, M. D., Medical Director, National Council on Alcoholism, New York City; "Psychiatric Aspects of Alcoholism and the Disabled Physician"—Manuel M. Pearson, M.D., Professor of Clinical Psychiatry, University of Pennsylvania School of Medicine, Philadelphia; "Effects of Maternal Drinking on Offspring"—Jacqueline A. Noonan, M. D., Professor and Chairman, Department of Pediatrics, University of Kentucky School of Medicine, Lexington; and "ABFP Certification and Recertification"—James Grobe, M. D., Past President, AAFP, Phoenix, Arizona.

Leon Goldman, M. D.

Richard Dorsey, M. D.

Saturday Morning

Neurology: "The Neurologic Exam—"What is Important and What Isn't"—Gunter R. Haase, M. D., Director, Department of Neurology, Pennsylvania Hospital, Philadelphia; "Parkinsonism Update"—(to be announced); "Office Management of Common Neurological Problems"—James V. Gainer, Jr., M. D., family physician, Kingwood; and "Emergency Management of the Overdosed Patient"—William E. Walker, M. D., practicing physician in emergency medicine, Saint Mary's Hospital, Huntington.

Saturday Afternoon

Dermatology: "Acne Update"—William Dvorine, M. D., Chief of Dermatology, Saint Agnes Hospital and Bon Secours Hospital, Baltimore, Maryland; "Topical Steroids—Is There Really Any Difference?" Leon Goldman, M. D., Professor Emeritus of Dermatology, University of Cincinnati School of Medicine; "Drug Eruptions—Diagnosis and Treatment"—Robert A. Briggaman, M. D., Department of Dermatology, University of North Carolina School of Medicine, Chapel Hill; and "Medical Examiner System in West Virginia"—Irvin M. Sopher, M. D., Chief Medical Examiner, State of West Virginia, Charleston.

Sunday Morning

Adolescent Problems: "Behavior Problems of Children and Adolescents as Indicators of Disturbed Family Dynamics"—W. Hugh Missildine, M. D., author and pediatric psychiatrist, Children's Hospital, Columbus, Ohio; "Adolescent Depression"—Richard Dorsey, M. D., practicing physician in psychiatry and Acting Group Director, Merrell-National Laboratories, Cincinnati, Ohio; and "Athletic Injuries in the Adolescent"—Colin M. Craythorne, M. D., orthopedic surgeon, Huntington.

Additional program details are scheduled to appear in the April issue of *The Journal*.

Mr. James T. Suter, left, of Charleston, a speaker during the Sunday morning session of the Tenth Mid-Winter Clinical Conference, talks with Dr. Ralph H. Nestmann of Charleston, Co-Chairman of the Mid-Winter Clinical Conference Program Committee. Mr. Suter is Executive Director of the West Virginia Health Systems Agency, Inc.

Psychosomatic Medicine Program Planned For April 1-2

A conference on "Psychosomatic Medicine" will be held April 1 and 2 at the Ramada Inn in South Charleston.

The sponsors will be the Charleston Division/West Virginia University Medical Center and its departments of Behavioral Medicine and Psychiatry, and Consumer/Continuing Education; the Charleston Area Medical Center, and the West Virginia Department of Mental Health.

John J. Schwab, M. D.

The conference will begin at 7 P. M. on Friday, April 1, with a social hour, banquet and keynote address by John J. Schwab, M.D., Professor and Chairman, Department of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine. His topic will be "Consultation-Liaison."

Registration will begin at 8 A. M. on Saturday, followed by a welcome and introduction by Martin J. Kommor, M. D., conference chairman, and Assistant Professor of Behavioral Medicine and Psychiatry, Charleston Division/West Virginia University Medical Center.

The speakers and their topics will include:

"Hypochondriasis"—Norman Altman, M.D., Assistant Professor of Psychiatry, Bronx Municipal Hospital Center; and Associate Clinical Professor of Psychiatry, Albert Einstein College of Medicine, Bronx, New York; "Psychological Stages in the Adjustment to Chronic Disease"—David A. Clayman, Ph. D., Assistant Professor of Behavioral Medicine and Psychiatry; and Coordinator, Consultation/Liaison Services, Behavioral Medicine and Psychiatry, Charleston Division/WVU Medical Center;

"Psychopharmacological Treatment of the Medically Ill"—James J. Strain, M. D., Director of Liaison Service, Montefiore Hospital and Medical Center; and Associate Clinical Professor of Psychiatry, Albert Einstein College of Medicine, Bronx, New York; and "Stress and Its Effects on Physical and Mental Life"—Thomas H. Holmes, M. D., Professor of Psychiatry and Behavioral Sciences, University of Washington School of Medicine, Seattle.

A panel presentation on "Medical Compliance" then will be conducted by Doctors Schwab and Hobbs and Dr. Stafford G. Warren, Associate Clinical Professor of Medicine, Charleston Division/WVU Medical Center.

The program will close at 4 P. M. following questions from the audience.

Dr. Charles A. Hoffman of Huntington, left, former President of the American Medical Association and the West Virginia State Medical Association, and Marshall University Libraries Director Kenneth Slack examine a Russian medical book written by the USSR Minister of Health. The book is one of three volumes of medical and historical interest recently donated by Doctor Hoffman to the Hoffman Room of the James E. Morrow Library at Marshall. Dedicated in 1975, the Dr. Charles A. Hoffman Library of Medical Sciences contains medical literature along with Doctor Hoffman's professional papers, medals and other memorabilia.

John J. Schwab, M. D.

Doctor Schwab, certified in internal medicine and psychiatry, is the author of the book, *Handbook of Psychiatric Consultation,* published in 1968. He is Associate Editor of "Psychosomatics," "Psychiatry in Medicine," "International Journal of Social Psychiatry" and "Journal of Psychiatric Education."

He was an internist and psychosomaticist at Holzer Clinic in Gallipolis, Ohio, from 1954 to 1959, and held several teaching positions at the University of Florida before going to Kentucky.

A native of Cumberland, Maryland, he was graduated from the University of Kentucky and received his M. D. degree in 1946 from the University of Louisville School of Medicine. He also earned an M. S. degree in Physiology in 1949 from the University of Illinois.

Among a variety of memberships and affiliations, Doctor Schwab is a Past President of the American Association for Social Psychiatry, Executive and Past President of the Academy of Psychosomatic Medicine, and a Fellow of the American Psychiatric Association, the American College of Psychiatrists, the American Association for the Advancement of Science, and the International Association of Social Psychiatry.

He is the author or co-author of three other books, three monographs and more than 100 articles.

Other Program Information

The program meets the criteria for 6 hours of Category 1 credit toward the American Medical Association Physician's Recognition Award.

The registration fee is $25 for doctoral-level professionals and $10 for other professionals, with no charge for residents and students. An additional fee of $10 is required for the banquet.

Registration and fees should be mailed to: Conference Coordinator, Charleston Division/WVU Medical Center, P. O. Box 2867, Charleston 25330 (phone (304) 348-7617). Checks should be payable to: WVU Foundation.

In view of limited registration, pre-registration by March 28 is requested.

Dr. Larry C. Carey To Speak At State ACS Meeting

Dr. Larry C. Carey of Columbus, Ohio, will be a principal speaker during the spring meeting of the West Virginia Chapter, American College of Surgeons, May 4-7 at The Greenbrier in White Sulphur Springs.

Doctor Carey is Professor and Chairman of the Department of Surgery, The Ohio State University College of Medicine. Certified by the American Board of Surgery in 1965, he is a Director of the Board and is a member of its In-Training Examination Subcommittee.

Larry C. Carey, M. D.

Doctor Carey is a Fellow of the American College of Surgeons and is a member of its Pre- and Postoperative Committee. A native of Coal Grove, Ohio, he also has held teaching appointments at the University of Pittsburgh, Marquette University and Boston University.

He received his M. D. degree in 1959 from Ohio State University, and served his internship and residency in surgery at Milwaukee County General Hospital in Wisconsin, with a fourth year of residency at Marquette. He was a founding member of the American Trauma Society and is a charter member of the Digestive Disease Foundation. He also is Secretary of the Society for Surgery of the Alimentary Tract.

Doctor Carey serves on the Editorial boards of the *Journal of Surgical Research* and the *American Journal of Surgery*. He is the author of 82 scientific papers, books and abstracts.

Further program details, including other speakers, are scheduled to appear in the April issue of *The Journal*.

Advances In Cancer Treatment Symposium In Baltimore

The Baltimore Cancer Research Center, National Cancer Institute and the University of Maryland School of Medicine, Baltimore, will present a comprehensive symposium designed to review current concepts of the natural history and management of a variety of neoplastic diseases March 24-26. This symposium will include sessions dealing with environmental and viral oncogenesis, regulation of cell growth, pharmacokinetics of common chemotherapeutic agents, and others.

For further information, contact the Program of Continuing Education, University of Maryland School of Medicine, 655 West Baltimore Street, Room 14-016, Baltimore, Maryland 21201.

200 State Suicides During 1975, Firearms Leading Method

Editor's Note: Following is the text of a recent issue of "State of the State's Health," by Dr. N. H. Dyer, State Health Director.

Of the 19,479 West Virginia residents who met their deaths in 1975, 200 of them did so of their own choosing—suicide victims. While this may seem like a very small number (only 1 per cent of the total deaths), the statistics gain in significance when you consider that these figures include the second leading cause of death in the 20-24 age bracket and the fourth leading death cause of those deceased age 15-19 and 25-44.

Who are these West Virginians who have chosen such an end? A very broadly generalized sketch would show us a person between 25 and 64 years of age, married, and employed as either a laborer or as a housewife. Breaking that information down we find that 76 per cent, or 152, of the suicide victims were males, meaning that 24 per cent, or 48, were females. One would expect the bulk of suicide victims to be in the middle-age range, and so they were, with 34.5 per cent between 25 and 44 years of age, while 16 per cent were over 64. The marital status as recorded by the victims' death certificates showed 56 per cent married, 17.5 per cent never married, 15.0 per cent divorced, 10.5 per cent widowed, and 1.0 per cent unknown.

How were these deaths accomplished? The statistics show that firearms were an available and popular method of suicide in West Virginia in 1975. An overwhelming 72.4 per cent of the suicide deaths occurring in that year were by use of firearms. The next most used method comes nowhere close to this. Suffocation, hanging, and strangulation, a very broad category, represents only 11.8 per cent of the total,

Number of Suicides by Month

Month	Number	Per Cent of Total
January	23	11.5
February	13	6.5
March	14	7.0
April	17	8.5
May	13	6.5
June	21	10.5
July	21	10.5
August	13	6.5
September	13	6.5
October	15	7.5
November	20	10.0
December	17	8.5
TOTAL	200	100.0

with poisoning by gas and poisoning by solids or liquids following at only 6.6 per cent and 5.3 per cent respectively.

When suicides are attempted is an interesting aspect in their study. Some theorize that there is a relation between holidays or date of birth and the timing of suicide. Although our data could not verify these arguments for West Virginia in 1975, the distribution of suicides throughout the year is interesting to note (see Table).

With all of the statistics about suicides in West Virginia it is important to note that the picture is not all gloom. Suicide in West Virginia has remained at a relatively constant rate over the past five years. Fluctuations over the period have gone from a low rate (per 100,000 population) of 10.0 in 1972 to a high of 12.5 in 1974. Only once over the past 10 years, in 1969, has suicide entered the overall ranks of the ten leading causes of death in our State. It ranks lower in our State than in the nation as a whole.

Pediatric Journalism Awards Program Announced

The American Academy of Pediatrics has announced an expanded 1977 Pediatric Journalism Awards Program for articles written on the subject of pediatrics from July 1, 1976, through June 30, 1977.

The Awards Program has been established to recognize journalism that contributes to a greater public understanding of child health, disease and treatment, pediatric research, and the role of the pediatrician as the primary child health care specialist. The program is made possible through a grant from Ross Laboratories, Division of Abbott Laboratories.

Three awards will be given this year. Two awards were presented in 1976 when the AAP initiated the program. An award of $1,000 will be made for the best newspaper article appearing in a newspaper with circulation of 100,000 or more. An award of $1,000 will be presented for the best article appearing in a newspaper with circulation less than 100,000. And a $1,000 award will be made for the best magazine article.

The awards will be presented to the winners at the annual meeting of the American Academy of Pediatrics, November 5-10, 1977, in New York City. Air fare and travel expenses will be provided for the winners. Deadline for submission of entries is July 31, 1977. All articles must be published in general circulation magazines or newspapers in the United States.

For additional information, contact Jack Lynch, Department of Communications, American Academy of Pediatrics, 1801 Hinman Avenue, Evanston, Illinois 60204 (phone (312) 869-4255).

Medical Meetings

March 12—Maternal—Fetal Monitoring Conference, South Charleston.

March 24-27—ASIM, Kansas, Mo.

March 26-31—Am. Academy of Allergy, New York City.

March 28-31—ACS, Los Angeles.

March 31-April 1—W. Va. Chapter, Am. Academy of Pediatrics, Morgantown.

April 1-2—Psychosomatic Medicine Conference, South Charleston.

April 3-9—Am. Assn. of Immunologists, Chicago.

April 13-15—National Conference on High Blood Pressure Control, Washington, D. C.

April 13-16—Am. Gynecological Society, Litchfield Park, Ariz.

April 16—W. Va. Assn. of Blood Banks, Charleston.

April 17-21—Am. Academy of Pediatrics, New Orleans.

April 17-22—Am. College of Radiology, Houston.

April 18-21—ACP, Dallas.

April 20-22—Medical & Chirurgical Faculty of Md., Cockeysville, Md.

April 22-23—Am. Heart Assn., Williamsburg, Va.

April 22-24—W. Va. Chapter, AAFP, Morgantown.

April 24-27—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

April 25-30—Am. Academy of Neurology, Atlanta.

April 29-May 1—Am. Trauma Society, Chicago.

May 4-7—W. Va. Chapter, ACS, White Sulphur Springs.

May 8-9—Am. Otological Society, Boston.

May 9-11—'Great Teachers' Conference (Am. Heart Assn.), White Sulphur Springs.

May 15-18—Am. Thoracic Society, San Francisco.

May 15-19—Ohio State Medical Assn., Columbus.

May 25-28—Am. College of Sports Medicine, Chicago.

May 30-June 1—Am. Ophthalmological Society, Hot Springs, Va.

June 5-7—Am. Diabetes Assn., St. Louis.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Nov. 6-9—Southern Medical Assn., Dallas.

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Run-Away Pacemaker: Diagnosis and Management

Hiroaki Asato, M. D.; Allen F. Bowyer, M. D.; Abnash C. Jain, M. D.; Robert J. Marshall, M. D.; And Thomas J. Tarnay, M. D.

This paper reports the successful diagnosis of transient pacemaker tachycardia ("run-away pacemaker") utilizing ambulatory 24-hour ECG monitoring (Holter Monitor), while the conventional ECG failed to show evidence of pacemaker failure.

The Authors

- **Hiroaki Asato, M. D.; Allen F. Bowyer, M. D.; Abnash C. Jain, M. D.; Robert J. Marshall, M. D., and Thomas J. Tarnay, M. D., from the Division of Cardiology, Department of Medicine, and the Division of Thoracic Surgery, Department of Surgery, West Virginia University School of Medicine, Morgantown.**

Cardiac pacemakers have been lifesaving devices in those patients with serious arrhythmia; however, it has been clearly documented that pacemakers themselves may produce arrhythmia problems. Pacemaker failure is usually diagnosed by the conventional 12 lead electrocardiograph (ECG) and/or selective lead rhythm strip. This requires the particular pacemaker failure to be sustained rather than transient. Present technology permits recording and analysis of transient arrhythmias which develop in ambulatory patients.[1,2,3,4]

Case Presentation

In 1968, a 54-year-old hypertensive, diabetic, white male underwent left femoro-popliteal bypass grafting for complaints of intermittent claudication due to arteriosclerotic vascular disease. He suffered an acute myocardial infarction four years later (1972) and subsequently had several episodes of congestive heart failure. In September, 1974, he noted his first episode of syncope. Three month later he was admitted elsewhere because of pulmonary venous congestion. The electrocardiogram at that time showed second degree atrioventricular (AV) block with 2:1 and 3:1 conduction ratios. Over the next few days the block advanced to third degree (complete) and he began to experience symptoms of weakness, dyspnea, and frequent bouts of lightheadedness. A temporary pervenous pacemaker electrode was inserted into the right ventricular apex, and pacing achieved immediate improvement.

He was transferred, on January 2, 1975, to the West Virginia University Hospital for permanent pacemaker implantation. Physical examination on admission showed a blood pressure of 140/90 at a paced heart rate of 80 beats per minute. Cardiac auscultation revealed rather distant first and second heart sounds but no third or fourth heart sounds or murmurs. Blood glucose was elevated to 270 mgs per cent and blood urea nitrogen was 33 mgs per cent. The electrocardiogram with the temporary pacemaker disconnected showed sinus rhythm with second degree AV block and slow ventricular response of 40 beats per minute. Within 24 hours the electrocardiogram had progressed to complete AV block. A permanent pacemaker (Medtronic, Model 5945) was implanted with the transvenous electrode in the right ventricular apex. The patient was discharged with a regular ventricular rhythm at a rate of 72 beats per minute. He was free from symptoms at discharge.

On March 3, 1975, the patient was seen in the pacemaker follow-up clinic and admitted with complaints of increasing dyspnea on exertion, occasional dizziness, and an episode of syncope.

Physical examination revealed an irregular heart beat with episodic slowing of the pulse to 44 beats per minute. Blood pressure was 130/80. Auscultation of the heart again revealed diminished first and second sounds and for the first time a third heart sound could be clearly heard. Scattered, fine rales were present in both posterior lung fields and there was moderate ankle and pretibial edema. The admission electrocardiogram, however, showed the pacemaker to be functioning normally and the rate to be regular at 72 beats. The patient was attached to a 24-hour ECG monitor (Holter Monitor) and was told he could go to the bathroom and walk about in the room if he desired. Subsequent analysis of the 24-hour rhythm strip revealed several events of failure of the pacemaker to capture the ventricle. More surprising was the appearance of a burst of tachycardia at the rate of 180 per minute which appeared to be due to the pacemaker itself (Figure 1). During the bouts of tachycardia small but definite pacemaker spikes could be seen preceding each QRS complex. The condition of "run-away" pacemaker was diagnosed and the failed pacemaker was promptly replaced by another Medtronic, Model 5945. He was free from symptoms at discharge.

Discussion

The primary objective of 24-hour ambulatory ECG monitoring is to detect those transitory arrhythmias which might not appear during the casual, routine ECG.[3,4] Many electrocardiographic abnormalities are related to activity, and may therefore not be reproduced by the usual supine, resting electrocardiogram obtained in the office. The chance of recording a transient arrhythmia by the standard 12 lead ECG can be computed. A patient with a heart rate of 60 beats per minute will have about 86,000 beats per 24-hour period, but only demonstrate 50 heart beats or less during the routine 12 lead ECG. This gives a probability of only six chances in 10,000 of recording a transient arrhythmia during routine ECG.

In Bleifer's published series[4] of 48 patients with suspected pacemaker malfunction, routine clinical examination, standard ECG, and pace-

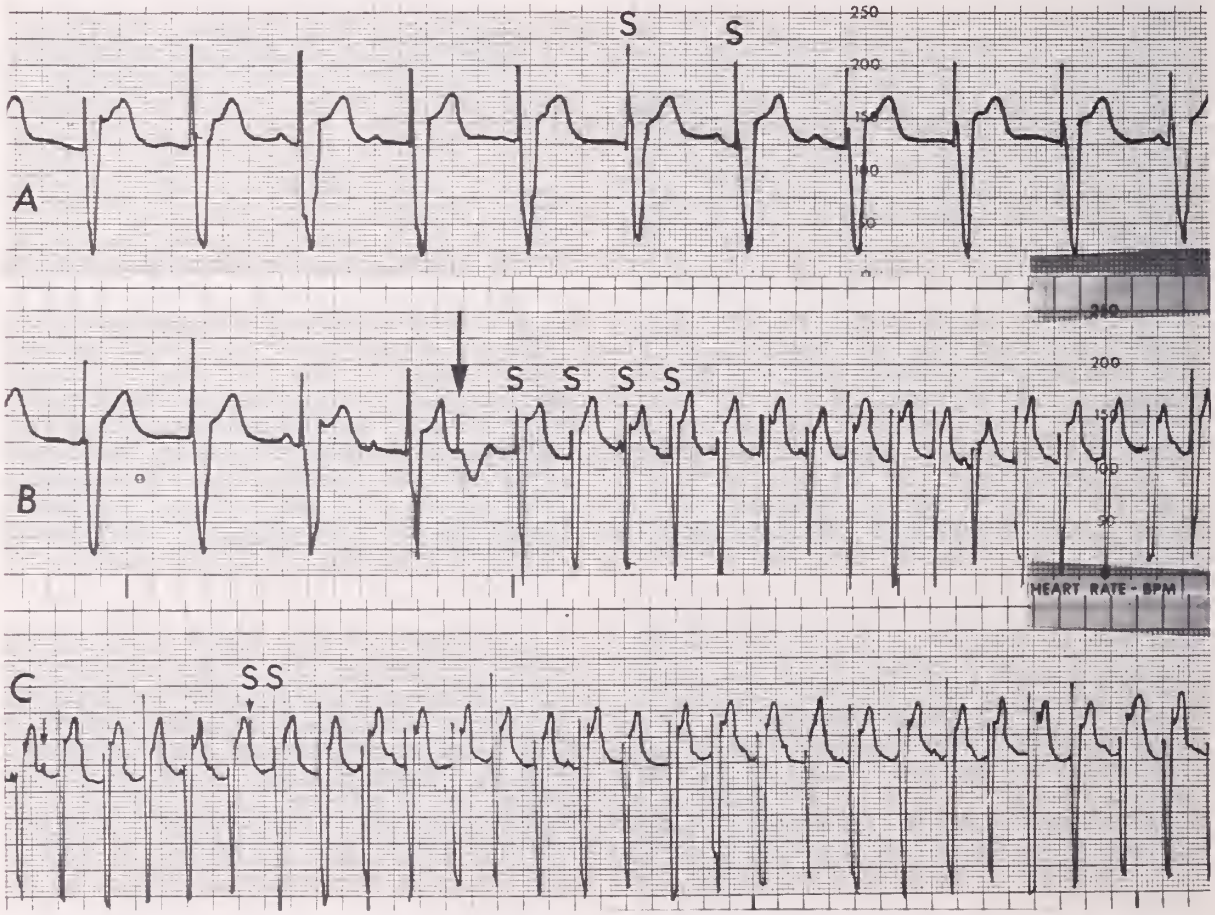

Figure 1. A, B, and C are continuous rhythm strips recorded on Holter Monitor from the patient while having intermittent "run-away" pacemaker. A shows functioning pacemaker firing at 72 beats per minute, but note different amplitude of pacemaker spikes (S). B and C show premature firing (indicated by large arrow), followed by "run-away" pacemaker of nearly 1:1 conduction with occasional failure to capture (indicated by a small arrow).

maker evaluation in clinics were unable to detect pacemaker malfunction in nine of these patients (18 per cent). Twenty-four-hour ambulatory electrocardiography is the current best method to detect these intermittent electrocardiographic events. In our study, although pacemaker failure was suspected because of symptoms, the standard ECG failed to detect the pacemaker-induced tachycardia, while the 24-hour ambulatory ECG documented this malfunction (Figure 1). In addition, the troublesome pacemaker itself was attached to the 24-hour monitor and demonstrated transitory rapid discharge following removal from the patient (Figure 2).

Pacemaker tachycardia ("run-away" pacemaker) malfunction has occurred in less than one per cent of reported series.[5,6] Pacemaker discharge rate can speed up due to battery depletion in older pacemaker units. This complication resulted in a substantial mortality from 1:1 pacing at this rapid rate with an abrupt loss of cardiac output.[6,7] "Run-away" pacemaker failure is rare in newer pacemaker units. In these units, "run-away" pacing appears not to be related to battery depletion, but to failure of specific electronic components.

The diagnosis and management of intermittent pacemaker malfunction requires the physician to have a higher degree of suspicion of pacemaker failure in those patients with symptoms of lightheadedness, ataxia, or syncope.[8] In spite of improved plastic incasement, isolation of battery from circuits and improved electronic design, "run-away" pacemaker can occur. The authors and others[6,7,8,9,10] suggest that pacemaker-induced tachycardia ("run-away" pacemaker) must be considered a medical emergency requiring immediate disconnection of the patient from the offending unit. This can be done rapidly by local infiltration of anesthesia in the area of the leads emerging from the unit, incision into this area to isolate the wires, then cutting the leads near their attachment. Connecting a temporary pacemaker to the exposed electrodes may result in prompt recovery in these patients. Obviously, antiarrhythmic agents are useless in terminating pacemaker-induced ventricular tachycardia. The authors further recommend that those pacemakers removed from symptomatic patients with suspicion of pacemaker-induced tachycardia be placed on a 24-hour monitor for detection of

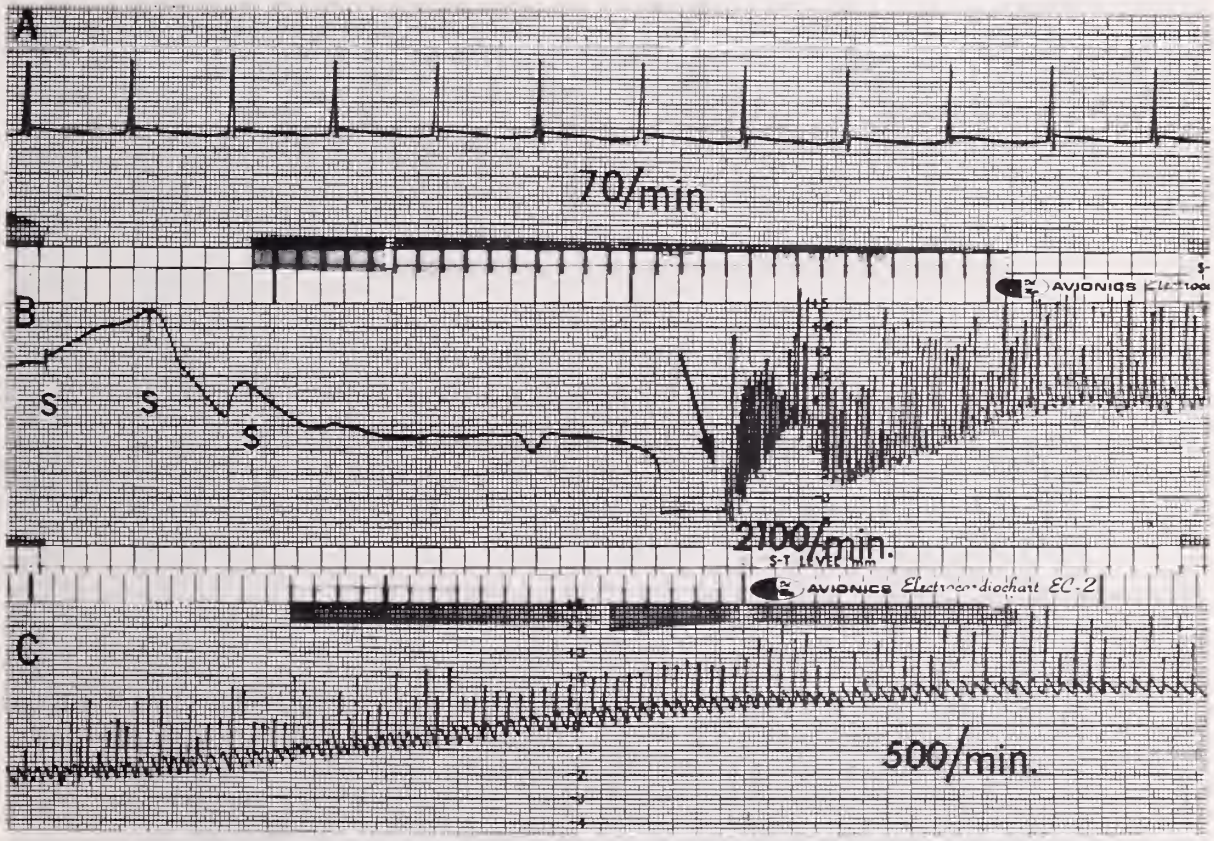

Figure 2. A, B, and C are not continuous. Removed pacemaker was attached to Holter Monitor. A shows regular firing of pacemaker at 70 per minute. B shows sudden change of pacemaker output (S), followed by short period of no output, then followed by a burst of "run-away," initially fired at a rate of 2100/minute, which gradually decreased in frequency. Also note changing output of each cycle.

abrupt increase of their pacing rate. This pacer malfunction should be particularly sought in those pacemaker patients who died suddenly.[11]

Summary

1. Twenty-four-hour ambulatory electrocardiographic monitoring may provide documentation for transitory arrhythmias which may well be missed by the standard 12 lead ECG.

2. "Run-away" pacemaker tachycardia may occur rarely even with the currently available, better designed pacemaker.

3. Twenty-four-hour monitoring of the removed offending pacemaker unit can further document transitory "run-away" failure.

4. The diagnosis of pacemaker-induced tachycardia ("run-away" pacemaker) is a medical emergency requiring immediate disconnection of the patient from the pacemaker power supply.

Acknowledgments

The authors thank Mrs. Gwen Smith for secretarial services.

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 1/2 by 11 in.) white paper. Wide margins (at least 1 1/4 in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

A Simple Method For Recovering The Embolized Polyethylene Catheter From The Heart And Pulmonary Artery

Edwin C. James, M. D.; C. Josh Tunca, M. D.; And Dominic Antico, M. D.

Embolic polyethylene catheter fragments are not uncommon sequelae with their widespread placement for central venous pressure (CVP) monitoring and surgical hyperalimentation. Until recent years, thoracotomy was frequently employed for removal. Currently, less radical methods are available which afford decreased morbidity and are strongly recommended. An illustrative case report is presented in which an embolized central catheter was recovered from the right ventricle by a simple wire-snare method using fluoroscopic identification and control. Comments are made regarding the technical features and their tentative role in the retrieval of the majority of catheter emboli from the heart and pulmonary artery.

The Authors

- **Edwin C. James, M. D., Department of Surgery; C. Josh Tunca, M. D., Department of Obstetrics and Gynecology; and Dominic Antico, M. D., Department of Radiology, West Virginia University Medical Center, Morgantown.**

Case History

A 45-year-old female was diagnosed as manifesting a stage I-B cervical carcinoma in January, 1975. The patient received 5,000 rads of external irradiation and I Fletcher-Stewart internal tandem-ovoid application. She did well until early March when she experienced rectal bleeding. Sigmoidoscopy revealed a punctiform shallow rectal ulcer seven cm. from the anal margin. Cytology and biopsy examination demonstrated radiation necrosis only.

In order to promote healing of the ulcer, the patient's gastrointestinal tract was placed at rest and she was started on total intravenous hyperalimentation. Percutaneous catheterization of the right subclavian vein was accomplished using a commercial polyethylene catheter* which features a metal adaptor for attachment to the intravenous line. Subsequently, it was reported that the entire catheter was missing and a chest X-ray subsequently located it within the subclavian vein with one end pointing toward the right atrium. Exploration of the insertion site failed to retrieve the catheter. The patient was then taken to the Radiology Department, where a right greater saphenous cutdown was performed. Under fluoroscopic guidance, it was easily extracted from the right ventricle without complication by a simple wire-snare apparatus. The patient made an uneventful recovery.

Method

There is a commercial broken catheter and wire-guide retriever set** which features an adult 8 French (8F) catheter 100 cm. long with a 250 cm. guide wire (outside diameter 0.533 mm.) and a pediatric 6 French (6F) catheter 45 cm. long with 125 cm. guide wire (outside diameter 0.450 mm.). The small sizes allow for added maneuverability within the heart and pulmonary arterial tree.

In our case, the snare was fabricated in the Department of Radiology (Figure 1). An 8F Cordis Ducor Multipurpose catheter*** with two side holes was used. One free end of a 260 cm. straight .025 stainless steel guidewire was inserted in each side hole of the catheter. These were advanced retrograde through the catheter until they protruded from the hub of the catheter. Hence, by pushing or pulling on the free ends, the loop at the tip of the catheter could be opened or closed.

After introducing the catheter by cutdown, the tip was advanced to the site of the foreign body (Figure 2). During this positioning, the snare at the tip was closed (by pulling on the free ends at the hub). Once positioned, the snare was opened by pushing in the free ends at the hub. The catheter was manipulated until the foreign body was in the loop of the snare. The snare was then closed by pulling on the free ends and trapping the foreign body against the catheter with the guidewire (Figure 2) insert. The entire

*Deseret Subclavian Jugular Catheter Set, Deseret Pharmaceutical Co., Inc., Sandy, Utah 84070

** Curry: Broken Catheter and Wire-Guide Retriever Set, Cook, Inc., 925 S. Curry Pike, Box 484, Bloomington, Indiana 47401

*** Cordis Corporation, Post Office Box 370428, Miami, Florida 33137

assembly was then withdrawn in one piece while keeping traction on the free ends of the guidewire to hold the foreign body immobile.

Discussion

With the continued utilization of central lines for resuscitative, CVP, or hyperalimentation purposes, the problem of occasional embolization of whole or fragmented polyethylene catheters to the heart and pulmonary artery has been well documented.[1-16] In most clinical situations, the overriding concern regarding perforation,[4] thrombosis,[15] or sepsis[1] complications often dictates their prompt removal. Wellmann *et al*,[16] in a review of the literature, recorded 13 deaths in 37 cases of polyethylene catheter emboli. Of these, the catheters were believed significant contributory factors in six, or nearly half, of the deaths. Until recently, thoracotomy[2,3,12,14] with direct operative extraction was usually undertaken. Unfortunately, this often resulted in a considerable increase in morbidity with an occasional operative mortality in sometimes very ill patients.

However, largely through the efforts of cardiologists, radiologists, and thoracic surgeons alike, a remarkable flexibility and expertise has

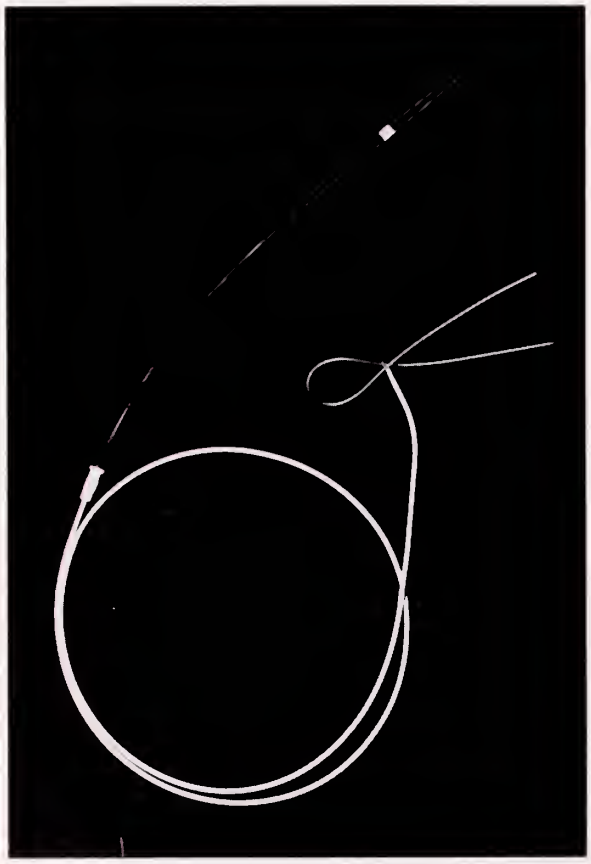

Figure 1. Cordis (8F) Ducor Multipurpose Catheter with "Snared" Polyethylene Catheter.

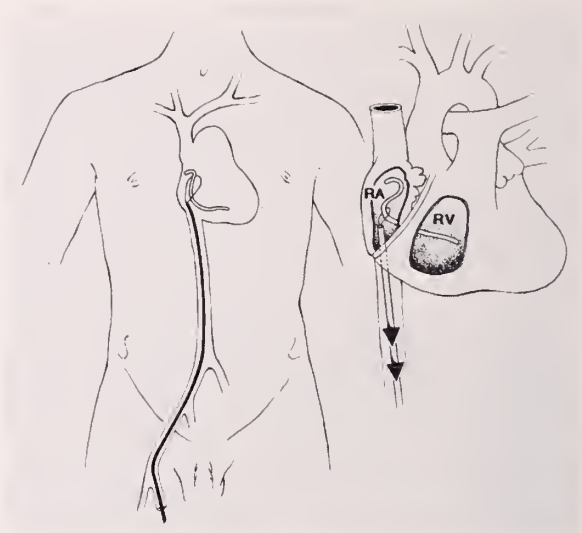

Figure 2. *Cordis Catheter positioned in the heart with loop open. Insert: Loop closing over catheter embolus in preparation for extraction.

developed in the manipulation of intravascular catheters. This has occurred mostly from experience gained in the areas of cardiac catheterization, angiography, and transvenous pacemakers. Accordingly, it is not surprising that a variety of relatively simple and atraumatic, modified catheter techniques would evolve with all sharing a "snare,[7-10] grasp,[5,6,13] or hook"[11] principle for extracting the embolized polyethylene catheter. The need for thoracotomy is thus avoided.

The method[7] we prefer incorporates a greater saphenous cutdown which is easily performed under local anesthesia. The procedure can be done in the operating room, but is best accomplished in radiology under ideal fluoroscopic control. The patient must be monitored carefully with immediate capability to treat upon demand any form of cardiac arrhythmia. This means anesthesia personnel must be on standby for any contingent resuscitative support required. With the apparent safety and decreased morbidity offered by this approach, we recommend it for the removal of the majority of polyethylene catheter emboli from the heart and pulmonary artery. Certainly, this procedure or one of similar merit should be attempted before committing these patients to formal thoracotomy.

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Zinc Tablets Help Acne

Tablets of zinc are effective in controlling acne, a Swedish research group reports in a recent issue of Archives of Dermatology, a scientific journal of the American Medical Association.

Gerd Michaelsson, M. D., of Uppsala University, Sweden, and colleagues gave their patients three tablets daily of zinc sulfate in effervescent form. The tablets were dissolved in water and taken after meals three times daily.

After four weeks there was a significant decrease in the number of blackheads, whiteheads and pimples. After 12 weeks, the acne had been reduced by 85 per cent in those treated, Doctor Michaelsson reported.

Some 64 patients were included in the study. More than half had had acne for more than two years, and many had been afflicted for more than five years. Ages ranged from 13 to 25 years.

Some of the patients were given zinc alone, others were given a combination of zinc and Vitamin A, some were given Vitamin A only, and some were given only a placebo. Those on a zince diet showed marked improvement. Vitamin A had no impact, he said.

How People Get Well Through Psychiatry*

James R. Hodge, M. D.

There is no therapy without a therapeutic history; and the better the history, the better the therapy. The most effective treatment by the family physician involves the recognition and relief of anxiety which can be accomplished in a number of ways. Realizing that a significant relief of symptoms is expected *with the passage of time, the family physician is in an excellent position to be a source of support to the patient while the "cure" is occurring. He can allow the patient to have his symptoms and to use them in promoting the cure while the doctor utilizes appropriate medical and psychiatric interventions. It is important that therapy should not be stopped too soon and that regular appointments are scheduled, thus expressing the doctor's continued interest in the patient and respect for his illness. An awareness of the process of illness and the process of cure is basic to the treatment of* any *illness.*

PSYCHIATRIC illness is much like physical illness in many ways. It can have a short duration like pneumonia or a long duration like tuberculosis. It can have a clear-cut termination like a broken bone or it can go on indefinitely like diabetes. It can be mild like a common cold or it can be as severe and deadly as cancer or a myocardial infarction.

At this point it may be helpful to list some typical psychiatric illnesses which the family physician may see in his office:

1. *Traumatic neurosis,* including battle fatigue, industrial injuries, accidents, and whiplash injuries.

2. *Adjustment reactions,* including marital maladjustment, occupational maladjustment, and grief.

3. Behavior disorders or *personality disorders* such as the passive dependent personality or the compulsive personality.

4. *The neuroses,* sometimes called the "symptom neuroses," such as phobias, anxieties, and obsessive compulsive illness.

5. *The "functional psychoses"* such as schizophrenia and manic depressive illness.

6. *The organic psychoses* such as intoxications, arteriosclerosis, and Alzheimer's disease.

7. *The psychsomatic illnesses* such as asthma, peptic ulcer, colitis, and others.

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In the sense that I am speaking, then, it is logical and helpful to think of the psychiatric illnesses as having a natural development and natural history just as the organic-physical conditions do.

The Development of a Psychiatric Illness

Whenever a physician is confronted with a patient who has a psychiatric illness, it will help to understand the patient and to prescribe a therapeutic program if he can answer such questions as, "How did the patient get sick?" and "What keeps the illness going?" Remember that a psychiatric illness does not just happen to someone any more than pneumonia just happens to someone. All symptoms have causes, and all behavior is purposeful. The symptom does make sense. The psychiatric illness can be better understood if the following aspects of the illness are kept in mind.

Predisposing Personality

The psychiatric illness does not just happen and cannot be treated as just an illness without taking the whole person into consideration. The illness develops in a living, feeling, breathing human being at a certain time in his life and under certain fairly specific circumstances. Preceding this problem and coexisting with it is his own basic and unique personality which has been developing throughout a lifetime. Each patient is an individual and there is no one else like him. Throughout his life he has developed his own patterns of handling stress, and he can be expected to react to stresses in the present and in the future in much the same way that he has done in the past. In this sense his behavior becomes predictable.

A simple example of this is that we can predict in rather general terms whether a given man will go to work tomorrow morning. If he has been a responsible and reliable person, we can predict

* This paper was prepared for delivery during the Tenth Mid-Winter Clinical Conference, January 28-30, 1977, at the Daniel Boone Hotel in Charleston, West Virginia. Weather conditions prevented the author from attending the conference. Doctor Hodge is author of "Practical Psychiatry for the Primary Physician."

that he will probably go to work. If he is irresponsible and has a history of frequent absences from work, we can predict that he is less likely to go to work tomorrow. Our predictions are reasonably correct, but they are not guaranteed, for the patient still has the element of free choice and can change his behavior.

We can picture an individual's course through life as being like a cross-country train ride. Given enough information about his pre-existing personality and his patterns of behavior, i.e., given enough information about where he has been and where he is now, we can often predict the train's destination. However, as a result of therapy or other experiences in his life, the man may get off that train at any stopping place and proceed in a different direction. So, knowing his past experiences and behavior and his coping mechanisms, we can often predict not only his future behavior, but also what illnesses he is likely to develop and how we can use his personality in order to help him.

Current Conflict

Rarely, if ever, will a psychiatric illness develop without a current conflict or problem which is disturbing the equilibrium of the patient's life. Examples of such conflicts are ongoing marriage problems and job dissatisfactions; and they almost always involve the patient's feelings about himself or about some significant other person in his environment. These conflicts are always superimposed upon and related to the predisposing personality. The patient may be consciously aware of the relationship of his current conflict to his present symptoms, or he may be totally unaware of it. Probably most of the useful short-term psychotherapy performed either by the family physician or by the psychiatrist is done when attention is focused on this particular area, demonstrating the relationship and helping to resolve the current conflict, thus making the symptoms unnecessary.

External Precipitating Stress

A person with a predisposing personality and a current conflict is ready for something to happen. The onset of symptoms is often due to a buildup of stresses over a period of time, and the external precipitating stress may appear to be trivial, like the straw that broke the camel's back. On the other hand, some sort of obvious and overwhelming external stress such as an accident, the loss of a job or a loved one, or some other significant situation, may occur. This external precipitating stress is what determines why the illness appears at a given time in the person's life instead of sooner or later. External precipitating stresses are almost always specific, discrete, and relevant episodes which may only seem to be incidental and may appear to the casual observer to be unimportant. It is in this area of the development of symptoms that early intervention and management is most important. Treat the symptoms but relate them to the patient's life.

The Development of Anxiety

Whenever a stress occurs, anxiety about the ability to handle the stress accompanies it. The anxiety may be tolerable or intolerable, but is felt as a recognition of an impending danger and a feeling of inability to cope with it. In a relatively normal person who has no significant current conflict, the stress may disappear and the anxiety may disappear with it so that no further symptoms will occur. A high index of suspicion that anxiety accompanies almost every illness will lead to the recognition of this emotional component and to its management with appropriate medical treatment, support and reassurance, and perhaps with the minor tranquilizers.

The Primary Gain or Symptom-Forming Factor

On the other hand, with the presence of a significant predisposing personality and current conflict, the anxiety may not be able to be handled well by the personality, and pathological defense mechanisms must be called into play. Anxiety is an unpleasant sensation much like physical pain, and the patient suffering from anxiety will do everything possible to obtain relief. The primary gain, then, is the relief of anxiety whether by normal or by pathological means. The pathological means are attempts to bind the anxiety or to control it, and these result in the formation of symptoms.

The Symptom Complex

The symptoms themselves may take any form from a simple maladjustment in living to a neurosis or a psychosis. All of these, however, are accompanied by anxiety and/or depression, and this indicates that the symptom has only been partially successful in relieving the anxiety. The symptom complex is what almost always brings the patient to the attention of the physician. This is his "ticket of admission" to the doctor's office.

The Secondary Gain or Symptom-Fixing Factor

Once the symptom has developed, then, what keeps it going? When the danger has passed, why doesn't the symptom go away? There are two answers to this: (1) the patient is not convinced that the danger has passed, and (2) the concept of secondary gain. The symptom has relieved

only a part of the anxiety, and to give up this symptom will mean that he must again confront the basic anxiety which he was not able to handle adequately in the first place. Further, he may find that the symptoms are of value to him with current problems in his life such as keeping his wife bound to him, gratification of dependency needs, opportunities to express hostility in an overt or covert way, or in his ability to control others. There may also be financial rewards such as those resulting from accidents. It must be emphasized that secondary gain does *not* imply malingering in any manner, but is part of the adaptive process to stress, which is really what the entire process of illness is all about.

The Process of Cure

Regardless of the nature and process of the illness or of the therapeutic strategies employed, the process of cure occurs only in certain ways. It has been said that, at least with an acute illness, two-thirds of the patients will get well without treatment in two years or less. It has also been said that regardless of the type of treatment, two-thirds of the patients will get well. Skilled therapists believe that (a) these are not the same two-thirds; (b) therapy hastens cure; and (c) therapy makes the symptoms more tolerable as the cure is occurring.

Factors Influencing Cure

There are several ways in which cure or the alleviation of symptoms may occur, and any combination of the following may be operating either in the relief of distress while cure is occurring or in the actual promotion of cure by the physician.

1. *The spontaneous cure.* The patient becomes well and we don't really know why. It may be by the support of the therapist, by an effort of will by the patient, by the natural history of the illness, by an unconscious awareness that the symptom is no longer necessary, or simply by unknown or unrecognized factors.

2. *Crisis.* Crises do occur in people's lives, and people often rise to meet the occasion. It is as if the crisis mobilizes abilities which have been dormant, or the patient is able to learn rapidly in order to handle the crisis. Sometimes the critical event is so cataclysmic that the entire personality changes much as in the nature of a religious conversion.

3. *An environmental change.* This may involve a change of jobs, a promotion, a change in geographical location, a marriage, or a divorce. Note that I did *not* say a vacation. I am referring to a basic and significant change—a vacation is not enough. If any of these events should occur, a mobilization and a redirection of interest may also occur and this may permit a favorable change in the personality to develop.

4. *The passage of time.* The universal truth that "This, too, shall pass" applies to psychosocial states of being. As mentioned earlier, most acute symptoms will terminate or be considerably modified, even ossified, within two years. Remissions and exacerbations of symptoms may occur, and these may or may not be related to the treatment program.

5. *Physical treatments.* These include electric shock treatment, neuroleptic (antipsychotic) drugs, tranquilizing (antianxiety) drugs, antidepressant drugs, and treatment of any contributing physical condition, including by surgery. For some patients these may be the only methods of treatment used; for some they may be the primary treatment, but for most patients the physical treatments should be considered adjuncts to the basic program of treatment of the whole patient.

6. *Modification of specific behavior or feelings.* This is most often accomplished with well-circumscribed symptoms such as anxiety, phobias, certain types of behavior, and sexual dysfunctions. The most effective technics involve one of the "behavior therapies" such as assertive training, systematic desensitization, or reciprocal inhibition. These technics are among the most simple and effective for the family physician to use. They are based on the theory that most anxiety-related symptoms are due to the presence of conditioned reflexes that are inappropriate, maladaptive, and removable by any one of a number of deconditioning or reconditioning technics. They are relatively easy to learn and to understand, sessions can be relatively brief, and the entire treatment program requires relatively few appointments. The therapist plays an active role. Insight into personal dynamics is bypassed for the most part, therapy can be repeated when necessary, and the results are often good.

Assertive training is receiving a great deal of attention in the popular literature today. If the family physician intends to use it, it is not enough to tell the patient to be more assertive or simply to tell him which book to read. It is necessary for the patient to practice with the physician in his office during a number of regularly scheduled sessions in which the successes and failures can be reviewed. If the physician is not willing to do this, it would be better to refer the patient

to someone else. This is best performed in groups but can easily be done on an individual basis.

Systematic desensitization is also quite easy to learn. The best way to think of systematic desensitization is to use the analogy of desensitization to allergies. Essentially, the patient is taught to relax and while relaxed to create visual images of himself being in a series of anxiety-evoking situations *while remaining relaxed.* The theory is that when he can do this comfortably in fantasy, there will be a carry over into the real world. It may be hard for the physician who does not use this technic to believe it, but it does occur. Again, the method is easy to learn, regular sessions of 20 to 30 minutes are necessary, and results can often occur within 10 sessions or so. I strongly urge every family physician to add these technics to his repertoire of treatment modalities.

Reciprocal inhibition is a modification of the systematic desensitization technic in which a pleasurable situation or sensation is paired with an unpleasant situation in a carefully graded manner so that the pleasurable sensation is stronger than the unpleasurable one and takes precedence over it, thereby gradually extinguishing the unpleasant sensation.

Paradoxical intention, which I call the "rhinoceros principle," is another effective technic for the family physician. Essentially, the patient is instructed to take charge of *having* his symptoms rather than attempting to avoid them. Then, whenever they occur, he is to study the natural course of the symptoms in detail. In this sense he is given a prescription to have the symptoms, and one of two things must happen: (a) The symptom will disappear as he has permission to have them and he looks upon them as desirable rather than undesirable, or (b) He will become an expert on his symptoms and will gradually learn to handle them better or even to dispense with them entirely. This is one of my favorite technics. It does require repeated sessions for the patient to report how he is doing and to receive repeated instructions and encouragement.

7. *Insight and understanding through treatment.* Analytically oriented psychiatrists believe that this is the most important, not only in relieving current problems and symptoms, but also in preventing future recurrences. However, it is probably one of the most difficult and time consuming technics for the family physician to use. When it is elected by the family physician he should expect to find certain phases that occur during the process:

A. In the beginning there is a release of tension as the patient reveals and discusses problems with the physician. In this phase a good working relationship is of vital importance. Confidence in the doctor is established as the more acute symptoms are given relief by the use of medicines or by various prescriptions for activities as described above, by discussing problems and by the administration of reassurance and explanations.

B. The next phase is that of cognitive learning. The process of the illness and its phenomena are studied in detail and patterns of behavior throughout the life history are identified and related to current problems. The patient learns about himself and the relationship of his past to his present.

C. The phase of "operant conditioning" could also be called the phase of "trial and error" based upon the cognitive knowledge acquired in the preceding stage. This involves applying his new knowledge of the past to the solution of current problems. It is important that the patient be encouraged to try new methods of behavior, to see what works and what does not, and why it works or does not.

D. As the patient studies his past and present behavior and discusses this with the therapist he begins to identify with the therapist much as he did with other significant models from his past, and this identification tends to lead to emulation on the child-parent model. This is the stage at which most of the so-called transference cures occur. For some patients this is all that is necessary, but it can be seen that no new growth of the personality has developed, only a new model of the child-parent relationship. This is the point at which most brief therapies stop, and it is probably a good place for the family physician to stop. The patient is at a new beginning and is allowed to develop further according to his own abilities. For completeness of therapy, though, the phase of identification and modeling should be followed by a prolonged period of working through of constantly applying and testing and evaluating the newly developed patterns of be-

havior in all the current life situations. The patient learns that he cannot live his life exactly the way the therapist lives his own, but that the patient is an individual who is capable of solving problems in his own unique way.

F. As the patient finds himself functioning independently as a more mature personality, he becomes ready for the phase of termination of therapy. It is often tempting to discontinue treatment abruptly at this point, but I personally prefer in most cases to use a weaning process of gradually decreasing the frequency of appointments, and I frequently see patients for yearly checkups.

What Makes Therapy Work?

Whatever treatment modality is chosen, there are a number of common factors which are found. Among these are the following:

(1) The patient begins to look upon his symptom not as something merely to be feared, but as a natural phenomenon with a meaning which is to be studied and understood. They do not occur out of context. There is a meaning and reason for them. They "make sense."

(2) The repeated recurrence of the symptom does no harm. It is to be studied and therefore can be used for personal growth. This tends to decondition the patient to his anxiety about the symptoms.

(3) The therapist himself demonstrates a lack of anxiety about the patient's symptoms and he gives prescriptions about how to handle them, thus demonstrating his knowledge of the problem.

(4) Motivation to handle the symptoms is created by giving the patient something specific to do about them, whether it is taking a medicine or whether it is a behavioral prescription. When the patient is convinced that the symptom, especially the anxiety, will end, he develops the courage, motivation, and interest to confront the symptom and handle it.

(5) The patient himself takes an active and prescribed part in the treatment program. The physician does not do something *to* him, but helps him to help himself.

Specific Recommendations

Having mentioned the general process of illness and the general process of cure, it may be helpful to give some general recommendations for the selection of treatment modalities based upon the broad psychiatric diagnoses.

(1) *The psychoses.* The approach should be to give immediate relief of anxiety and relief of psychotic symptoms as quickly as possible by the use of appropriate antipsychotic medicines. Supportive psychotherapy with analysis of the patient's current conflicts and problems in living should accompany this, and should in turn be followed by general supportive and increasingly infrequent but *regularly scheduled* follow-up sessions.

(2) *The symptom neuroses, including anxiety and depression.* The immediate focus should be on the control of anxiety with the use of antianxiety drugs, or of depression by the use of tricyclic antidepressants with or without the use of antianxiety drugs. A complete diagnostic history is taken with focus on the analysis of the current conflict and external precipitating stress, and a basic therapeutic strategy is then chosen from those discussed previously.

(3) *Psychosomatic conditions.* A basic diagnostic history should be taken with emphasis on the current conflict and circumstances which precipitate episodes of the illness. Learn what the patient can do to bring on an episode of his illness. Then anxiety is treated with antianxiety drugs while the physical condition is being appropriately treated. The long-range goals should be to educate the patient about the physical condition itself while relating the specific episodes to periods of current psychological stress. Relating these episodes to the patient's past life and stress situations is quite helpful.

(4) *The adjustment reactions.* These may be treated by superficial counseling or by referral to a psychiatrist, minister, or psychiatric social worker. The use of antianxiety medicines may be appropriate.

(5) *The traumatic neuroses.* Depending upon the nature of the symptoms, these may be treated as acute anxiety states or like other psychosomatic conditions. Referral for psychiatric consultation should be done more than it usually is.

(6) *Personality problems.* If these present themselves to the office, they are probably best referred to a psychiatrist.

110th ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 24-27, 1977

PLAN NOW TO ATTEND

A message from . . .

The President

SUPPORT YOUR AUXILIARY

My message this month is a plea for the doctor to support his wife. Now, support is not meant to connote food, shelter, clothing, and transportation, but to support and encourage her activities in the medical auxiliary. To those of you who are female physicians, just reverse the sex and continue reading.

Our wives have taken over the job of soliciting for AMA-ERF and deserve our thanks for a super success. They work and sponsor many other projects dear to the medical community: hospital magazine and book carts; gift and snack bars; nursing and para-medical scholarships; Christmas benefits; political information panels; and many other worthwhile endeavors. And they are fantastic social secretaries!

If your county medical auxiliary is a little weak, help it organize again and provide interesting programs. If the members are responsive and operating on all 12 cylinders, tell them so and give them encouragement, thanks, and support. And don't fuss about the dues. They're tax deductible. Amen! Or Awomen!

John J. Mahood, M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

GENERIC DRUG SUBSTITUTION

The practice of medicine is difficult enough. We don't need anyone or anything to make it more complicated. Patients do not need any part of medical care to be more hazardous than it has to be.

Generic prescription drugs is approaching the status of blueberry pie, motherhood and the flag. It sounds good—even logical and reasonable. Why shouldn't the cheaper of the two equivalent drugs be dispensed at the pharmacy? Isn't that what the American system is all about? . . . competition, the spark that ignites the free enterprise system . . . enough of these corpulent drug companies getting fatter at the expense of the hapless sick!

And yet, we really haven't noticed drug company stocks zooming on the stock market. And what about the word EQUIVALENT? It's easy enough to define. Webster defines it: "To have equal power." But who is to determine the standard? And who is to certify that a product reaches that standard? The FDA has admitted the hopelessness of the task. The very expense and number of man hours involved in testing and comparing every manufactured drug product in the pharmacopeia is totally mind boggling.

Generically-similar drugs in equivalent dosages are not necessarily equivalent in therapeutic effect. There are at least 30 major elements in the drug-manufacturing process which can lead to unexpected and unusual responses in the body.

A few examples:

—*Dicumarol* is an anticoagulant used in life-threatening conditions such as impending strokes, coronary artery disease or thrombotic conditions which can lead to cerebral or pulmonary emboli and sudden death. Different products of the same generic drug were tested and showed a 300-per cent difference in their anticoagulant effect. Too much *Dicumarol* will lead to massive bleeding and exsanguination. Too little is worthless therapeutically. What happens to the unfortunate patient stabilized on one product who gets a generic substitution from his pharmacist?

—*Digoxin* is a powerful drug given to a patient with a failing heart or a person with a dangerous irregularity in the rhythm of his heart. Too little is ineffective in assisting the laboring heart; too much is poisonous and can be quickly fatal. The products of 36 companies manufacturing *Digoxin* were tested; 33 of the companies were found to be producing either superpotent or subpotent products. Should thousands of patients on daily *Digoxin* be subjected to the risk of a generic substitution at the drug store?

—*Antacids* are taken by patients for peptic ulcer. They help to control pain and complications such as bleeding or perforation at the site of the ulcer. Most good products will dissolve in solution in 30 minutes. Some take more than four days. Test this yourself.

The list could be extended indefinitely. The delicate balance of dosage required for many life-sustaining drugs is of critical importance. Generic drug-substitution laws deny physicians control over this critical aspect of care.

Many drugs, on the other hand, are safe to prescribe on a generic basis. Physicians know this and have prescribed these drugs generically for years. Responsible drug substitution is practiced daily in the cooperative relationship between physician and pharmacist. It is done when they both feel comfortable about the quality and efficacy of the substituted product.

Bills have been introduced in both houses of the West Virginia Legislature (H.B. 910 and 1268, and S.B. 172) to permit pharmacists to substitute a less expensive so-called generic equivalent or brand name product unless specifi-

cally prohibited by the prescribing physician. The latter gives small protection to the patient. He deserves more.

Drug-substitution laws are classic examples of government being penny wise and pound foolish. Every legislator with a true regard for the health and safety of the sick and infirm among his constituents and his own loved ones will vote against these bills. They deserve a quick and resounding defeat.

PSRO PROSPECTS

Professional standard review organizations are not now and never have been totally accepted by physicians. Initially, the very idea of someone looking over his shoulder, making judgments, criticizing and second-guessing his decisions, was enough to whiten the knuckles and raise the blood pressure of any self-respecting doctor.

To the credit of most doctors, there has been a gradual mitigation of these angry reflexes at the inherent intrusiveness of PSROs. This easing has not been an abject surrender to the inevitability of review procedures so much as it has been a realization of the objective necessity of some form of review.

Notwithstanding the easing of feelings against them, PSROs do not have, as yet, clear sailing in regard to their hopes for total cooperation from doctors. Mistakes can be made in method and approach which could still result in the scuttling of the total PSRO program.

One part of the dilemma for American doctors is how to respond in an effective and responsible way to the certain fact that unchecked health care costs have the potential of bankrupting the nation. The other part of the dilemma is how, at the same time, to maintain their primary responsibility of assuring the best care for their patients.

It is clear that professional *medical* responsibility for a patient finds itself in some conflict with *fiscal* responsibility for an insurance fund or government tax program paying for that care. Doctors are being asked to make recommendations limiting care for their patients in order that government might enjoy health care cost control. The burden of reconciling these immiscible responsibilities has been placed on the unwilling shoulders of the medical profession. The clear alternative to the assumption of this thankless task is that it will be done in some manner by non-physicians with far less judgment and compassion.

With full recognition of the necessary compromises, it has been the decision of responsible medical leaders to recommend acceptance of and cooperation with PSROs. It is not required, nor even expected, that there will be no conflicts, complaints, or bitter disagreement. It would seem to be almost the *responsibility* of an attending physician to protest vigorously the actions of—if not actually condemn—those responsible for prohibiting whatever beneficent plans he might have for a patient who is otherwise eligible. Nor are government people likely to be totally happy with PSROs or anyone other than themselves authorizing the expenditure of dollars they regard in some peculiar way as their own. On our part, *The Journal* promises to be among the foremost in criticizing PSROs whenever the opportunity presents itself.

PSRO employees are likely to be as popular as IRS men at medical social events; one fringe benefit henceforth available to irritable doctors, patients and government bureaucrats alike is that a convenient target for their outrage has now been erected.

We take this opportunity to express our sympathy to various physicians directly involved in PSRO activity for the abuse they can expect to receive. We will simply note in passing that they will fully deserve, from one side or the other, most of what they get. We hope and trust their stamina is up to the rigors of their work.

THE PRIVATE PRACTITIONER

A fascinating pastime—if one can squeeze out an hour or so occasionally for it—involves reviewing editorial pages of other medical journals. In many instances, this provides a thought-provoking look at the problems of others, and often how physicians in other states are facing up to the same challenges as those troubling West Virginians.

The following has been gleaned from an editorial in the Journal of the Medical Society of New Jersey. We offer it as an interesting reflection of how "other folks" look at more than a local concern.

"The Dodo bird, Raphus solitarius, which formerly inhabited the islands of Mauritius, Reunion, and Rodriguez, is extinct. Certain species of whale—the blue, humpback, gray, and 'right' whales—are endangered. There is now strong evidence that one species of physician—the private practitioner—also may be destined for extinction!

"The population of private practitioners always has been considered 'smallish.' Some argue that this is a statistical artifact and that maldistribution is the real problem. If one uses a ratio of physician-to-population in the inner cities, there is a shortage. If one relates the physician population to the present and potential demand for services, there is a marked shortage. Be that as it may, there is evidence that fewer medical school graduates are interested in private practice; instead, they are leaning toward employment in the armed forces, health maintenance organizations, health centers, industrial and government medicine, and research. Furthermore, the record shows that many physicians are leaving private practice for early retirement (their reasons include professional liability insurance problems) or are taking 'retirement jobs' to reduce the level of pressures. These elements—small population size, departure of practitioners and diminished reproduction of primary physicians in private practice at the medical school and postgraduate level—lend credence to the endangerment thesis.

"The whale mainly is endangered by the attack of unnatural predators—man, the fishing industry, and especially 'whalers.' The private practitioner of medicine (as well as the private practice of medicine) is also being attacked by unnatural predators—some insurance commissioners and other state and federal officials, some congressmen, some union representatives, some lawyers, some insurance intermediaries, most consumer advocates, and, most remarkably, by some patients.

"The physician has individual (perhaps biologic and genetic) characteristics which may devastate the ranks of private practice as well. Unlike the products of the cookie cutter, physicians are individuals and no two are alike. This individuality is coupled with incentive drives—mainly for professional and personal satisfaction—even at the sacrifice of comfort, rest, and recreation on many occasions. If these incentives are taken away and the private practitioner is placed in a position of economic disadvantage by a social system devised by predatory forces, the survival of American Medicine as we have known it is questionable. The environment clearly has become hostile—threats, ingratitude, and interference with practice are the key elements of this hostility. . . .

"It behooves this nation jealously and zealously to protect private practitioners from extinction. Like the Dodo bird and the endangered whale—once gone they will never return."

Our Readers Speak

Simple Medical Treatment

The Editorial Board cannot endorse treatment methods outlined in the following. We are curious, however, about what other simple methods of treatment might currently be in use elsewhere. We invite comment.

In these days of sophisticated electronic gadgets and complicated diagnosis and treatment, perhaps we are overlooking the fact that effective treatment can be very simple:

About 2,000 years ago, a Chinese physician wrote in his textbook of medicine that there was a simple treatment for what is now known as acute appendicitis. He made a small incision in the right lower quadrant with a butcher knife and observed pus coming out from this incision. He remarked philosophically, that as barbaric as the procedure looked, it could have been the only correct treatment. The writer once observed a country medicine man treating an abscess of the foot. He boiled a bamboo cylinder and placed it over the abscess. As the cylinder cooled, pus was sucked out from the abscess. This medicine man, who was not trained as a medical doctor, made the remark that in treating an abscess, it was important to suck the pus out. It should never be squeezed out.

In April, 1958, the writer had a typical attack of *biliary colic.* Subsequent oral cholecystogram revealed multiple small radiolucent calculi in the gallbladder. He put himself on a low cholesterol diet and bile salts. Atropine or belladonna was occasionally used for relief of epigastric distress. No other treatment was given. Within a period of three months, the symptoms were greatly alleviated. Occasional epigastric distress occurred from time to time within the first year. After five years, all symptoms were gone. A repeat oral cholecystogram no longer revealed any calculi in the gallbladder.

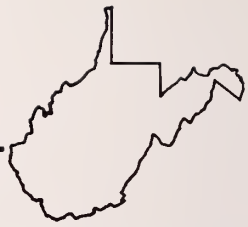
In a few cases of early *duodenal ulcer* that the writer had treated, the treatment was simple and relief relatively fast. The patients were given plenty of fluid and soup as well as rice porridge in small but frequent feedings. No medication was given. The patients were instructed to lie only on their right side when they slept to facilitate emptying of the stomach. Early duodenal ulcers appeared to respond very well to this treatment.

The writer has found a simple but effective treatment for *periodontal disease.* About 5 to 6 cc. of vodka was kept in the mouth for a period of about 20 to 30 minutes. The vodka should be swished around in the mouth and between the teeth to kill the bacterial flora of the oral cavity. Antibiotics or hydrogen peroxide are generally inefficient. Vodka or any alcoholic beverage of similar strength can be used. Twice or three times a week is generally sufficient to control periodontal disease.

The writer does not advocate the above treatments for all patients. However, it should be emphasized that it may be advisable today to search for some simple treatment of any kind of disease.

C. H. Lee, M. D.
Montgomery (W. Va.) General Hospital

GENERAL NEWS



Kansas And USPHS Physicians Annual Meeting Speakers

A Kansas psychiatrist and a representative of the U. S. Public Health Service Center for Disease Control in Atlanta will be among the scientific speakers during the 110th Annual Meeting of the West Virginia State Medical Association, it was announced by Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee.

Dr. Harold M. Voth, senior psychiatrist and psychoanalyst at The Menninger Foundation in Topeka, Kansas; and Dr. W. David Hager, clinical

Harold M. Voth, M. D.

W. David Hager, M. D.

research investigator with the Center for Disease Control, will present papers during the second general scientific session on Friday morning, August 26.

The Annual Meeting will be held at The Greenbrier in White Sulphur Springs, August 24-27.

Doctor Voth's topic will be "The Psychiatric Antecedents of Cancer," while Doctor Hager will speak on "Management of the Gonorrhea Patient."

Harold M. Voth, M. D.

Doctor Voth, a native of Newton, Kansas, has served in his present position since 1955. In Topeka, he also is Consultant and Associate Chief of Psychiatry for Education at the Veterans Administration Hospital, and Consultant at Stormont-Vail Hospital.

Doctor Voth also is Consultant in Psychiatry to The Surgeon General of the Navy.

Certified in 1953, he is an Examiner, in Basic and Clinical Psychiatry, for the American Board of Psychiatry and Neurology, Inc.

He received "outstanding teacher" awards from the 1970 and 1971 graduating classes of The Menninger School of Psychiatry.

Doctor Voth, whose special research interests are psychoanalysis and problems of ego organization, was graduated from Washburn University in Topeka and received his M. D. degree in 1947 from the University of Kansas School of Medicine in Kansas City. He interned at San Diego (California) County General Hospital and was a resident in psychiatry at the Veterans Administration Hospital in Topeka. He also is a graduate of The Menninger School of Psychiatry and the Topeka Institute for Psychoanalysis.

Doctor Voth is a Charter Fellow of the American College of Psychoanalysts, and a Fellow of the American Psychiatric Association and the American Association for Advancement of Science.

The author or co-author of some 35 scientific articles, he has lectured before a variety of professional and lay groups. He also has been interviewed in the lay press and on radio and television.

W. David Hager, M. D.

Doctor Hager is Assistant Surgeon in the Venereal Diseases Division of the Center for Disease Control; and is Associate Clinical Professor, Department of Gynecology and Obstetrics, Emory University School of Medicine in Atlanta.

A native of Lexington, Kentucky, he was graduated from Asbury College in Wilmore, Kentucky, and received his M. D. degree in 1972 from the University of Kentucky. He interned at the Hospital of the University of Virginia, in Charlottesville, and served a residency in obstetrics and gynecology at the University Hospital, University of Kentucky Medical Center, in Lexington.

Doctor Hager has conducted studies on the "Utilization of Perinatal Care Facilities in Whitley County, Kentucky (1970)," sponsored by the State Health Department of Kentucky; and "The Etiology of Pre-eclampsia of Pregnancy (1971)," sponsored by the State Health Department of Kentucky and the Department of Obstetrics and Gynecology, University of Kentucky Medical Center.

A Junior Fellow of the American College of Obstetricians and Gynecologists, he served as Program Director for the Junior Fellow portion of the District V ACOG meeting in Bermuda in 1975.

Three General Scientific Sessions

Doctor Bell said there will be three scientific sessions on Thursday, Friday and Saturday morn-

ings. It was announced previously that Drs. John J. Rick of Morgantown and Thomas W. Langfitt of Philadelphia will speak at the first general scientific session on Thursday morning, August 25, which will be devoted to a "Symposium on Management of the Multiple Trauma Patient." Names of other guest speakers, and program details, will be provided in future issues of *The Journal.*

Business Meetings

The Pre-Convention Meeting of the Council will be held on Wednesday morning, August 24, and the first session of the House of Delegates has been scheduled that afternoon. It also was announced previously that Dr. John H. Budd of Cleveland will speak at the first session of the House of Delegates. Doctor Budd will be installed as President of the American Medical Association during the annual meeting at San Francisco in June.

Dr. John J. Mahood of Bluefield, the President, will deliver his Presidential Address at the final session of the House of Delegates on Saturday afternoon, August 27.

Pulmonary Diseases Seminar April 16 In Morgantown

A one-day seminar on "Acute Pulmonary Diseases in Adults and Children" will be held on Saturday, April 16, at the Ramada Inn in Morgantown. Designed for the practicing physician, the seminar (8:30 A.M. to 4 P.M.) will be co-sponsored by the West Virginia Lung Association/West Virginia Thoracic Society and the Continuing Education Office of the West Virginia University School of Medicine.

The speakers and their topics will be:

"Bronchiolitis in Children"—Rosa L. Nemir, M. D., Professor of Pediatrics, New York University Medical Center; "Cystic Fibrosis"—Pamela Davis, M. D., Clinical Associate, National Institutes of Health, Bethesda, Maryland; "Acute Aspects of Asthma"—Harry K. Tweel, M. D., Director, Pulmonary Laboratory, Cabell-Huntington Hospital, Huntington;

"Pulmonary Edema"—John J. Rick, M. D., Associate Director, Intensive Care Unit, WVU Medical Center; and "Acute Pneumonias"—Roger G. Finch, M. D., Division of Infectious Diseases, WVU School of Medicine.

The registration fee will be $30 for physicians and $10 for allied health personnel and physicians-in-training.

For further information contact the Lung Association at P. O. Box 4228, Charleston 25304 (telephone (304) 925-6664).

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. N. LeRoy Lapp, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

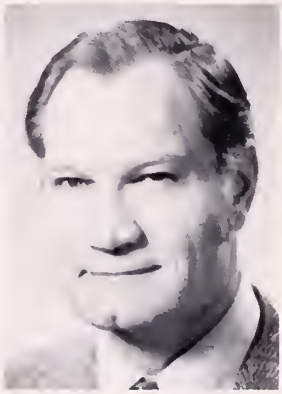
Apr. 1-2	Psychosomatic Medicine	Charleston
Apr. 2	Cardiology Teaching Day	Parkersburg
Apr. 15-17	Annual Scientific Assembly, Department of Family Practice	Morgantown
Apr. 16	Surgery Day	Wheeling
Apr. 22	Third Annual ENT Teaching Day	Morgantown
Apr. 22	Jackson General Hospital Visiting Physician Program	Ripley
Apr. 28	Stonewall Jackson Memorial Hospital Visiting Physician Program	Weston
Apr. 29, 30	Present and Future of Microbiology—The Role of Automation	Morgantown
May 7	Medicine Day—Coronary Artery Disease	Wheeling
May 27	Jackson General Hospital Visiting Physician Program	Ripley
June 3, 4	Fourth Annual White Water Surgery Conference	Charleston
June 13-18	School of Alcohol and Drug Abuse Studies	Morgantown
June 18	Anesthesia Update '77	Morgantown

Teaching Day On Endocrinology To Honor Doctor Lizarralde

"Recent Developments in Endocrinology" will be the title of the scientific program for the "German Lizarralde Teaching Day" to be held on May 3 in Charleston at the Heart-O'-Town Motor Inn.

The program is being sponsored by the medical house staff of the Charleston Area Medical Center and the Charleston Division/West Virginia University Medical Center in recognition of the contributions to the teaching program by Doctor Lizarralde, Director of Medicine at the Charleston Division/WVU Medical Center from 1975 through last December.

German Lizarralde, M. D.



Grant W. Liddle, M. D.

Doctor Lizarralde now is Professor of Medicine and Vice Chairman for Clinical Programs, Department of Medicine, Medical University of South Carolina, Charleston.

A reception will be held on Monday evening, May 2, at 7:30 (Room 204), with all registrants invited to attend.

Tuesday's program will begin with registration at 7:30 A.M., followed by a welcome from H. Bradford Hawley, M. D., Assistant Professor of Medicine, Charleston Division/WVU Medical Center.

The speakers and their topics for the morning session will include "Present Concepts of Hypothalamic Hormones"—Doctor Lizarralde; "Hypercalcemia and Prostaglandins"—Stephen R. Grubb, M. D., Assistant Professor of Medicine, Charleston Division/WVU Medical Center;

"Hypertension"—Grant W. Liddle, M. D., Professor and Chairman, Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee; and "Estrogen Production in the Post-Menopausal Woman: Some Clinical Implications"—John E. Jones, M. D., Professor of Medicine and Dean, WVU School of Medicine, Morgantown.

Also serving on the faculty will be Drs. Edmund B. Flink, Professor of Medicine, WVU School of Medicine, Morgantown; and Douglas L. Jones, Fellow in Endocrinology, WVU School of Medicine, Morgantown.

Case presentations and panel discussion by the faculty will comprise the afternoon session, with adjournment at 3:30.

This program meets the criteria for 5 and one-half hours of category 1 credit toward the American Medical Association's Physician's Recognition Award.

German Lizarralde, M. D.

A native of Bogota, Colombia, Doctor Lizarralde received his M. D. degree in 1959 from Javeriana University School of Medicine there. He interned at Jefferson Hospital in Roanoke, Virginia, and served a residency in medicine at WVU Hospital in Morgantown.

Doctor Lizarralde held several academic positions at the WVU School of Medicine from 1965 through 1972, and then went to Charleston, South Carolina, as Chief, Nuclear Medicine Section, Veterans Administration Hospital; and Associate Professor, Department of Medicine, Medical University of South Carolina.

He is certified by the American Board of Internal Medicine and the American Board of Nuclear Medicine, Inc., and also is certified in endocrinology. He is a Fellow of the American College of Physicians and the American College of Clinical Nutrition, and a member of the American Federation of Clinical Research, the Society of Nuclear Medicine, and the Endocrine Society.

Doctor Lizarralde received the Golden Apple Award for Clinical Sciences from the Student American Medical Association at the Medical University of South Carolina in 1973-74.

Grant W. Liddle, M. D.

Doctor Liddle is President of the International Society of Endocrinology, President Elect of the Association of Professors of Medicine, and a Past President of the American Society for Clinical Investigation, The Endocrine Society, the Southern Society for Clinical Investigation, and the Nashville Society for Internal Medicine.

He was the recipient of the Henry Hallet Dale Medal of the (British) Society for Endocrinology in 1973, and also was presented the Distinguished Leadership Award in Endocrinology from The Endocrine Society in 1971.

Doctor Liddle, who joined the staff of Vanderbilt University School of Medicine in 1956, is a native of Utah. He was graduated from the University of Utah and received his M. D. degree in 1948 from the University of California, where he also served his internship and residency in medicine.

The author or co-author of almost 200 articles and papers, he was a member of the Editorial Board of the Journal of Clinical Endocrinology and Metabolism from 1960 to 1967, and a member of the Edi-

torial Committee of the Journal of Clinical Investigation from 1967 to 1971.

Other Program Information

There will be a registration fee of $20 for physicians and no charge for residents and students. Pre-registration is requested. Registration and fees may be sent to: Conference Coordinator, Charleston Division/WVU Medical Center, P. O. Box 2867, Charleston 25330. For additional information telephone (304) 348-7617.

State Family Physician Assembly Scheduled April 22-24

The 25th annual scientific assembly of the West Virginia Chapter, American Academy of Family Physicians, will be held April 22-24 at the Lakeview Inn and Country Club in Morgantown.

Activities will get under way with a board of directors meeting on Thursday, April 21, at 7 P. M. in the West Virginia Chapter Hospitality Suite. The board also will meet on Sunday at 1 P. M.

Ray M. Kessel, M. D.

Marshall J. Carper, M. D.

Registration will be held at 8 A. M. on Friday and Saturday.

The House of Delegates will meet on Friday from noon to 1:30 P. M. in the hospitality suite.

Dr. Edward J. Jackson of St. Albans will serve as master of ceremonies during the Saturday evening banquet.

Some 18 speakers will participate in the scientific program, which will be divided into the topic areas of "Office Orthopedics," "Problems of the Alcoholic," "Neurology," "Dermatology" and "Adolescent Problems" (See the March issue of *The Journal* for the speakers and their topics).

Dr. Ray M. Kessel of Logan, President of the West Virginia Chapter, AAFP, will speak at the opening session beginning at 8:30 A. M. Friday, followed by a welcome from John E. Jones, M. D., Dean and Professor of Medicine, West Virginia University School of Medicine. Opening remarks regarding the program will be made by Dr. Marshall J. Carper of South Charleston, the program chairman. Doctor Carper, AAFP President Elect, is Associate Director of the Kanawha Valley Family Practice Center in South Charleston.

Serving as moderators for the scientific sessions will be Drs. Donald A. Blum, South Charleston, Friday morning; Wilbur Z. Sine, Morgantown, Friday afternoon; Dean Patton, Morgantown, Saturday morning; David W. Nesselroade, Morgantown, Saturday afternoon; and William L. Harris, South Charleston, Sunday morning.

State, Pennsylvania ACS Chapters To Meet Jointly May 5-7

A joint meeting of the West Virginia Chapter and the Southwestern Pennsylvania Chapter of the American College of Surgeons will be held May 5-7 at The Greenbrier in White Sulphur Springs.

The Thursday, May 5, agenda will include the presentation of the third-prize resident paper and five Southwestern Pennsylvania Chapter papers (topics to be announced).

Alfred D. Ghaphery, M. D.

William E. Gilmore, M. D.

Dr. Alfred D. Ghaphery of Wheeling, President of the West Virginia Chapter, will preside during Friday's session, which will begin with the presentation of the second-prize resident paper.

The other speakers and their topics will include "Surgery for Chronic Pancreatitis"—Larry C. Carey, M. D., Professor and Chairman, Department of Surgery, Ohio State University College of Medicine; "Carcinoma of the Thyroid"—John H. Ellyson, M. D., Instructor in Surgery, West Virginia University Medical Center, Morgantown;

"Present Considerations in Management of Ovarian Carcinoma"—Fernando G. Giustini, M. D., Department of Obstetrics and Gynecology, Wheeling Division, West Virginia University Medical Center; and "The Rationale for Surgical Cytoreduction"—James P. Boland, M. D., Professor and Chairman, Department of Surgery, Charleston Area Medical Center.

Dr. Robert J. Gardner of Morgantown, second vice president of the West Virginia Chapter, will preside on Saturday.

The session will begin with the presentation of the first-prize resident paper, followed by these speakers and topics:

"Small Bowel Obstruction in Neonates"—Ellen E. Hrabovsky, M. D., Assistant Professor of Surgery and Pediatrics, WVU Medical Center, Morgantown; "Management of Bile Duct Strictures"—Doctor Carey; and "Split Thickness Skin Grafts—Their History, Evolution, and Current Status"—David A. Kappel, M. D., Wheeling, Clinical Assistant Professor of Surgery, WVU Medical Center.

The scientific program will be followed by remarks from the West Virginia Chapter Governor, Dr. William E. Gilmore of Parkersburg, and a business meeting.

WVU Wheeling Division Plans Surgery Teaching Day

"Surgery Teaching Day" will be held by the Wheeling Division/West Virginia University Medical Center on April 16 at the Ohio Valley Medical Center. The program will begin at 8 A.M. in the auditorium.

Speakers and their topics will include "The Hartmann Procedure In Perforated Colonic Diverticulitis"—Charles D. Hershey, M. D., Wheeling; "Bacteriology and Antimicrobial Therapy of Diverticular Disease"—William G. Gardner, M. D., Wheeling; "Medical Aspects of Diverticular Disease"—William E. Anderson, M. D., Morgantown; "The Pressures of Aging and Diverticular Disease"—Alvin L. Watne, M. D., Morgantown; and "Complicated Sigmoid Diverticulitis"—Rupert B. Turnbull, Jr., M. D., Senior Surgeon, Department of Colon and Rectal Surgery, Cleveland Clinic.

The morning session will conclude with a panel discussion by the above physicians on colon surgery, with Doctor Hershey as the moderator.

The afternoon session will include "Options In Surgical Treatment of Gastric and Duodenal Ulcer" —Stanley O. Hoerr, M. D., Chairman, Department of Surgery, Fairview General Hospital, Cleveland; and Emeritus Surgeon, Cleveland Clinic; "Medical Treatment of Peptic Ulcer Disease"—Doctor Anderson; and "Selective and Super-Selective Vagotomy" —Avram M. Cooperman, M. D., Surgeon, Cleveland Clinic. There will be a concluding panel discussion by these physicians on peptic ulcer disease, with Dr. Edward C. Voss of Wheeling moderating.

The program meets the criteria for eight hours of category 1 credit toward the American Medical Association Physician's Recognition Award—and for eight hours of prescribed credit by the American Academy of Family Physicians.

The fee is $35, which includes lunch.

Medical Meetings

April 13-15—National Conference on High Blood Pressure Control, Washington, D. C.

April 13-16—Am. Gynecological Society, Litchfield Park, Ariz.

April 16—Acute Pulmonary Diseases in Adults and Children (W. Va. Lung Assn./Thoracic Society, WVU), Morgantown.

April 16—W. Va. Assn. of Blood Banks, Charleston.

April 17-21—Am. Academy of Pediatrics, New Orleans.

April 17-22—Am. College of Radiology, Houston.

April 18-21—ACP, Dallas.

April 20-22—Medical & Chirurgical Faculty of Md., Cockeysville, Md.

April 22-23—Am. Heart Assn., Williamsburg, Va.

April 22-24—W. Va. Chapter, AAFP, Morgantown.

April 24-27—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

April 25-30—Am. Academy of Neurology, Atlanta.

April 29-May 1—Am. Trauma Society, Chicago.

April 29-May 1—Advanced Cardiac Life Support Training Course (Am. Heart Assn., Va. Affiliate), Roanoke, Va.

May 3—Recent Developments in Endocrinology (CAMC & Charleston Division/WVU Med. Center), Charleston.

May 5-7—W. Va. and Southwestern Pa. chapters, ACS, White Sulphur Springs.

May 8-9—Am. Otological Society, Boston.

May 9-11—'Great Teachers' Conference (Am. Heart Assn.), White Sulphur Springs.

May 15-18—Am. Thoracic Society, San Francisco.

May 15-19—Ohio State Medical Assn., Columbus.

May 25-28—Am. College of Sports Medicine, Chicago.

May 30-June 1—Am. Ophthalmological Society, Hot Springs, Va.

June 5-7—Am. Diabetes Assn., St. Louis.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Nov. 6-9—Southern Medical Assn., Dallas.

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Villous Adenoma Of The Stomach

T. H. Chang, M. D.

A review of the previously reported villous adenomas of the stomach is presented. An additional villous tumor in the stomach is reported.

The occurrence of this tumor in the stomach is rare. Certain clinical features are discussed and their radiological characteristics are described. The value of endoscopic examination is highly appreciated. The high rate of malignancy is emphasized and the management of these tumors is discussed.

The Author

- **T. H. Chang, M. D., Nationwide Building, 164 Thompson Drive, Bridgeport, West Virginia; and Attending Surgeon, United Hospital Center Inc., Clarksburg, West Virginia.**

Case Report

A 61-year-old caucasian male was admitted to the hospital on March 10, 1975, because of vague epigastric discomfort, increasing indigestion and weakness over a period of several months. In addition to exhaustion, his main complaint was the occurrence of repeated episodes of hematemesis and melena which developed a few days prior to admission.

Physical examination was unremarkable except for pallor and moderate tenderness in the epigastric area. The hematocrit was 32 volume per cent and the hemoglobin was 10.6 gm. The next day the hematocrit and hemoglobin showed a decline to 28.5 volume per cent and 8.9 gm. Since the lesion was located in the fundus of the stomach where it is usually considered to be a difficult area for radiological diagnosis, an upper gastrointestinal series was thought to show the usual gas bubbles in the fundus of the stomach. Retrospectively, however, the roentgenograms showed the so-called "soap bubble" effect which consisted of multiple radiolucent, round areas in the fundus of the stomach (Figures 1, 2).

A fiberoptic gastroesophagoscopy revealed a large, reddish-pink and velvety tumor in the fundus of the stomach. On March 17, 1975, the patient underwent a laparotomy. During the operation the tumor was found to be so soft that the mass would have been unrecognizable by palpation over the gastric wall without the information from the previous gastroscopic findings. A gastrotomy revealed an 11 x 7.5 x 6.0 cm., reddish-pink, soft, velvety and papillary tumor on a short and broad-based stalk, 5.5 x 1.0 cm., located in the fundus of the stomach. The under-

Figure 1. An upper gastrointestinal series revealed usual gas bubbles in the fundus of the stomach.

Figure 2. Retrospectively, the so-called "soap bubble" effect.

lying gastric wall was firm in consistency and indurated (Figures 3, 4). A biopsy and frozen section revealed areas of adenocarcinoma transformation. A proximal radical subtotal gastrectomy, including splenectomy, was carried out. Pathologic examination of the specimen revealed villous adenoma with evidence of malignant transformation (Figures 5, 6). His postoperative course was uneventful and to date there has been no evidence of recurrence (Figures 7, 8).

Comment

Walk, in 1951, reviewed the literature for villous adenoma of the stomach. He collected 51

Figure 3. A large, reddish-pink, soft, velvety and papillary tumor on a short and broad-based stalk.

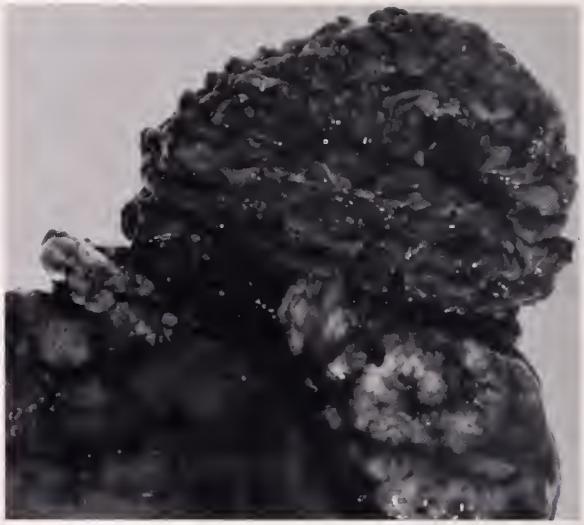
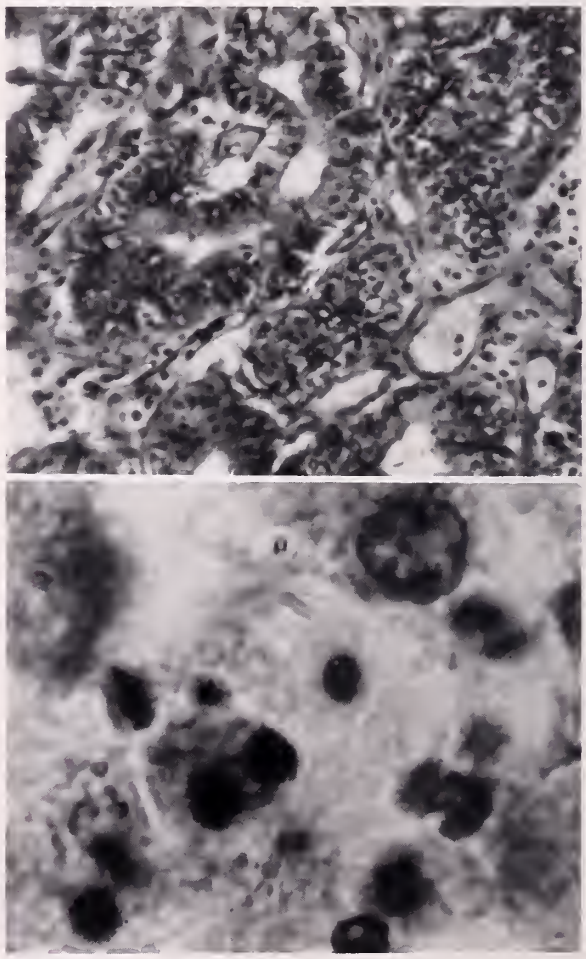


Figure 4. The underlying gastric wall was firm in consistency and indurated.

cases with 68 tumors and added two cases observed by himself.[17] Since Walk's review, 12 additional villous tumors of the stomach have been reported. In Walk's series, 18 tumors of the



Figures 5, 6. Pathologic examination revealed villous adenoma with malignant transformation.

70 reported were not identified as benign or malignant. Of the remaining 52, 21 were benign and 31, malignant. In Marshak and Feldman's report of eight villous adenomas of the stomach, malignancy was said to be frequent without giving exact numbers.[10]

A comprehensive review was made by Bremer *et al*, in 1969. for villous adenoma of the upper gastrointestinal tract. He stated that the lack of uniform terminology used for this tumor made his review difficult. He included in his report only adequately documented cases.[2] There was a total of 72 patients with 92 tumors distributed through the upper gastrointestinal tract. There was one case of villous tumor of the jejunum.

Including our case, a total of 68 cases with 83 villous tumors of the stomach have been reported.

Clinical Feature

Chronic bleeding with associated anemia is a rather frequent observation. In Walk's review, occult blood was observed in 75 per cent of the cases while 19 per cent showed frank tarry stool. Walk stated that weakness was present in 67 per cent of his cases.[17] Complaints varying from vague gastric discomfort to true epigastric pain, frequently of the ulcer type, were found in over half of the cases. Nausea and vomiting were complaints in over 30 per cent of the cases of the gastric lesions. In several instances diarrhea was one of the dominant features. In none of the reported cases is any mention made of serum electrolyte values. Whether villous tumors of the stomach have the same secretory ability as some of the colonic and rectal lesions is stated to be unknown. It is probable that during the passage of such voluminous secretions through the intestinal tract reabsorption of fluid and electrolytes would occur.

Figure 7. Six-month-postoperative upper gastrointestinal series revealed no evidence of recurrence.

Figure 8. Upper gastrointestinal series 18 months postoperative.

Diagnosis

A typical radiographic appearance has been described for villous tumors of the stomach. Walk, in 1951, mentioned the so-called "soap bubble" effect which was mentioned earlier in French literature (mousse de savon").[17] This effect consists of multiple radiolucent, round areas interspersed in a fine work of radiopaque material which entered into the clefts between the fine, fond-like projections of the tumor. In our patient, due to the location of the tumor in the fundus of the stomach, the radiographic appearance resembled the usual gas bubbles in the fundus of the stomach. The so-called "soap bubble" effect was only appreciated retrospectively. Wolf, in a detailed discussion of the roentgen diagnosis of villous tumor of the colon, emphasized the importance of multiple spot films during the course of filling.[13,19] Needless to say, the value of fiberoptic esophagogastroscopic examination cannot be over-emphasized.

Pathology

Villous adenomas are soft, velvety, sessile or with a broad-based stalk neoplasma, reddish-pale gray in color with numerous finger-like projections. Villous adenomas, also known as papillary

adenomas, are benign tumors which have a strong tendency to develop into malignancy. Masses as large as 15 x 13 cm. and 11 x 14 x 4 cm. have been reported in the stomach. In our patient the tumor measured 11 x 7.5 x 6.0 cm. on a short, broad-based stalk that measured 5.5 x 1.0 cm.

The benign tumors are usually reddish-pink in color and have a velvety consistency. Those having firmer consistency, possibly with induration of the underlying gastric wall, are highly suggestive of malignancy. They may be sessile or have a broad-based, short stalk (like our case). Microscopically, they show innumerable fine, finger-like projections. There seems to be an increased incidence in the sixth and seventh decade. Malignancy is more likely to occur in larger lesions.[2] Walk stated in his report that malignancy occurred in 75 per cent of the lesions which were over four cm. in diameter. The malignant changes usually occurred in the center and at the site of the stalk of the tumor. Walk believes that villous tumors of the stomach are premalignant lesions which sooner or later become malignant with metastatic potentials.[17]

Management

Villous adenoma of the stomach may be associated with local invasion, spread to the regional lymph nodes and distant metastasis. Bremer felt that it is important to recognize this tumor grossly. Neither its size nor consistency is an absolute criterion of its benign or malignant nature.[2] It might be difficult for the pathologist to answer the questions as to the nature of the lesion on a frozen section; therefore, when villous tumor is encountered in the stomach or small bowel, wide resection, including the regional lymph nodes, should be carried out.

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Emergency Laryngectomy For Trauma Of The Larynx

Romeo Y. Lim, M. D.

Total laryngectomy is usually performed on patients with cancer of the larynx who are not amenable to either cobalt radiation or sub-total laryngectomy. However, it should also be performed on a severely traumatized larynx that is beyond repair. Review of the literature on injuries to the larynx and trachea failed to reveal a case managed by total laryngectomy.

The Author

- **Romeo Y. Lim, M. D., Chief of Surgery, The Eye and Ear Clinic of Charleston; member of the staff, Charleston Area Medical Center; and Clinical Associate Professor, Division of Otolaryngology, West Virginia University Medical Center, Morgantown.**

Case Report

The patient, a 52-year-old white female was admitted to the emergency room for shotgun injury to the right neck and soft and bone tissues of the lower and upper extremities. An emergency tracheostomy was performed below the injured site. In addition, Ringer's lactate was given intravenously and two units of blood were immediately transfused. Using a piece of towel, pressure dressing was applied to the right neck. The right cervical skin and soft tissues were torn open and had sustained gun powder burns. Palpation of the thyroid and tracheal cartilages showed severe fragmentation. Portable x-rays of the neck, chest and lower extremities showed multiple pellets embedded in the soft tissues. The thyroid cartilage and upper trachea were severely fractured. Chest x-ray did not reveal a pneumothorax or hemothorax.

Figure 1. Shotgun injury to the right neck, larynx, and trachea.

Surgical Technique

The patient was taken to the operating room and general anesthesia was induced through the tracheostomy opening using a #32 spiral tube. The neck wound was scrubbed with Betadine. The neck was then prepped with the same solution and draped in the usual manner. The anterior skin flap was elevated, exposing the right lateral neck and also the larynx and trachea. Multiple bleeders were first controlled. Multiple pellets filled the right cervical area with one pellet transecting the internal jugular vein, but missing the common carotid artery by a millimeter.

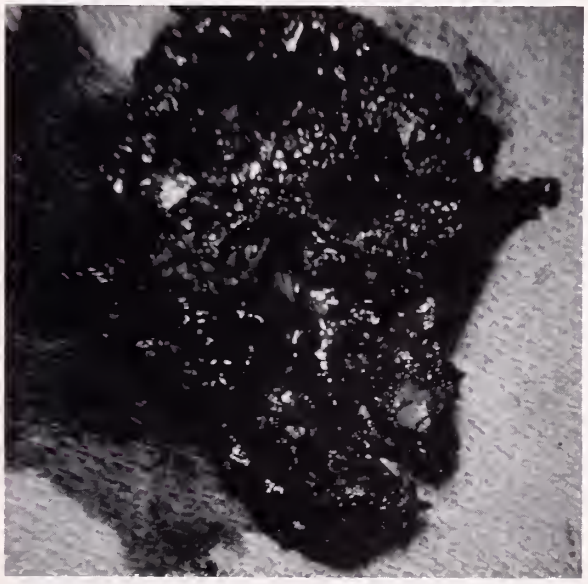

Figure 2. Anterior view of fragmented laryngeal and upper tracheal cartilages.

Figure 3. Reconstructed neck using delto-pectoral flap.

The internal jugular vein was isolated, clamped, cut and doubly ligated with 2-0 silk. After all the bleeders were controlled, exploration of the thyroid cartilage, cricoid cartilage and upper two tracheal rings showed these structures in fragments with maceration of the soft tissue structures of the larynx. The larynx, cricoid cartilage and upper two tracheal rings were removed. The pharyngo-esophageal defect was repaired with 4-0 Dexon running Connell sutures after a #16 polyethylene feeding tube was inserted and brought out through the nose. The edges of the avulsed skin were excised. Burned and contused soft tissues of the neck were debrided. The cervical wound was thoroughly irrigated with saline solution. A right delto-pectoral flap based sternally was elevated and rotated to cover the defect in the right neck. Skin graft taken from the left thigh was used to cover the right delto-pectoral area. The laryngectomy stoma was created. Hemovac drains were inserted into the right neck, and dressing was applied to the skin graft. An aeroplast spray was administered to the suture lines on the neck.

Figure 4. Postoperative result three months later.

The patient tolerated the procedure well and was transferred to the Intensive Care Unit in satisfactory condition. Broad spectrum antibiotics were given before, during and after surgery.

Course in the Hospital

The postoperative course was uneventful. The feeding tube was removed on the twelfth postoperative day and oral feedings started. The delto-pectoral flap and skin graft were viable. The patient was discharged on the fourteenth postoperative day and was referred to a speech therapist for rehabilitation two weeks thereafter. She subsequently developed an excellent esophageal speech.

Discussion

Management of multiple trauma, including the head and neck area, observes the following principles:

1. Establishment of an airway (insertion of an endotracheal tube or tracheostomy).
2. Control of bleeding.
3. Replacement of fluids and blood.
4. Definitive reconstructive procedure.
5. Functional rehabilitation.

The survival of this patient was dependent upon two critical factors, namely: (1) proximity to the hospital (incident occurred two blocks away), and (2) avulsed cervical skin and soft tissue providing passage for temporary airway.

Conclusion

A case in which an emergency laryngectomy was performed on a severely injured larynx and upper trachea was presented. The basic principles involved in the management of a multiple injured patient were outlined.

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Medical Grand Rounds

From the West Virginia University Medical Center

Edited By

Raymond B. Weiss, M. D.
Associate Professor of Medicine

Drug-Induced Systemic Lupus Erythematosus

Discussants: Carl E. Heltne, M. D.; And Anthony G. DiBartolomeo, M. D.

Carl E. Heltne, M. D., Resident in Medicine.

Case Presentation

The patient is a 54-year-old retired coal miner who presented to the Clarksburg Veterans Administration Hospital in March, 1969, with an acute diaphragmatic myocardial infarction. Since his course was complicated by ventricular arrhythmias, he was started on procainamide (Pronestyl) at the time of discharge.

After a two-year symptom-free period, the patient had a series of admissions for chest discomfort, the most recent being in November, 1975. At that time the patient complained of malaise, diffuse myalgias, and chest discomfort which was pleuritic in nature. His medications on admission included procainamide, digoxin, hydrochlorthiazide (HydroDiuril), isosorbide dinitrate (Isordil), and nitroglycerin. The electrocardiogram revealed no acute changes, and the chest x-ray was within normal limits. The serum chemistries, electrolytes, and serology were within normal limits, but the sedimentation rate was 68 mm./hr. A diagnosis of a procainamide-induced systemic lupus erythematosus (SLE) syndrome was entertained. The procainamide was discontinued and blood for an antinuclear antibody (ANA) was drawn. Five weeks after discharge the patient was asymptomatic. The ANA was subsequently reported as having a titer of 1:1000 in a diffuse pattern, and the LE cell preparation was positive. The diagnosis was confirmed. In spite of treatment with other drugs, his heart disease remains a major problem.

Discussion

The first report suggesting the induction of a lupus-like syndrome by agents used to treat other diseases was published in 1945.[1] In 1948, Hargraves *et al* published their discovery of the LE cell phenomenon.[2] This discovery precipitated an avalanche of publications relating the occurrence of the LE cell phenomenon to the use of various drugs. However, it was not until 1953 that a definite and reproducible syndrome of drug-induced systemic lupus erythematosus (SLE) became apparent in the form of the hydralazine (Apresoline)-induced syndrome.[3]

Drug-induced SLE is a syndrome which must first of all satisfy the clinical criteria for the diagnosis of SLE established by the American Rheumatism Association (Table 1). Secondly, the patient must have received the incriminated drug before the onset of any of these signs or symptoms. Thirdly, the disease process must reverse itself upon the cessation of the suspected agent.

TABLE 1

American Rheumatism Association Criteria for the Diagnosis of SLE

1. Facial erythema
2. Discoid lupus
3. Raynaud's phenomenon
4. Alopecia
5. Photosensitivity
6. Arthritis without deformity
7. LE cells (two or more) in blood
8. Chronic false positive serological tests for syphilis
9. Hemolytic anemia, leucopenia (less than 4000/mm^3), or thrombocytopenia (less than 100,000/mm^3)
10. Oral or nasopharyngeal ulceration
11. Proteinuria (over 3.5 g/day)
12. Urine cellular casts
13. Pleuritis or Pericarditis
14. Psychosis or convulsions

A patient must have any four or more of these 14 manifestations serially or simultaneously during the interval of observation to make a diagnosis of SLE.

The list of drugs reported to be associated with induction of SLE includes many agents that have been associated with musculoskeletal complaints or a positive ANA or LE cell preparation, but fail to fulfill the necessary criteria for the diagnosis of drug-induced SLE. The classification of these agents by Lee and Chase seems to be an appropriate one. They divided the drugs into three groups according to the relative risk of causing the SLE syndrome (Table 2).[4]

TABLE 2

Drugs Suspected of Inducing a Lupus-like Syndrome

High-Risk Drugs°
1. Procainamide (Pronestyl)
2. Hydralazine (Apresoline)
3. D-Penicillamine (Cuprimine)

Moderate-Risk Drugs
1. Isoniazid (INH)
2. Phenytoin (diphenylhydantoin–Dilantin)
3. Ethosuximide (Zarontin)
4. Thiouracils
5. Trimethadione (Tridione)

Small-Risk Agents
1. Primidone (Mysoline)
2. Chlorpromazine (Thorazine)

Doubtful and Probably Innocent Agents
1. Reserpine (Serpasil)
2. Alpha-methyldopa (Aldomet)
3. Quinidine
4. Allopurinol (Zyloprim)
5. Estrogen–progesterone combinations for contraception
6. Sulfonamides

°Will produce the defined clinical syndrome in one per cent or more of the patients. Adapted from Lee and Chase.[4]

Clinical Manifestations

In general, the initial clinical manifestations of drug-induced SLE are essentially the same as the idiopathic disease, namely, arthritis/arthralgias, myalgias, fever, and pleuritis. However, the frequency with which individual features of the disorder occur varies according to the type of drug involved.

The differences between the idiopathic and drug-induced form of lupus are listed in Table 3. The most important of these differences clinically is the rarity of renal involvement in the drug-induced syndrome.

Of the various drugs reported to cause this syndrome, four have been selected for further discussion because of their proven implication in the production of the syndrome or because of their wide usage. They are procainamide, hydralazine, isoniazid, and oral contraceptive agents.

TABLE 3

Comparison Between Spontaneous SLE and Drug-Induced Lupus Syndrome

	Spontaneous SLE	*Drug-Induced SLE*
Frequency of Remission	38%	75%
Female/Male Ratio	7:1	2:1
Black/White Ratio	4:1	<1:1
Antibody to native DNA	60%	<3%
Serum complement level	often decreased	rarely decreased
False positive serology	20%	variable
Positive Coombs' test	5%	rare
Renal involvement	3%	rare
Pleuritis/Pericarditis	25%	variable*

*Variable: 2% for hydralazine, 30% for procainamide.

Procainamide (Pronestyl)

Procainamide was introduced as an antiarrhythmic agent in 1951, and the first patient to develop symptoms of SLE was reported in 1962. Procainamide is partially hydrolyzed by plasma esterases and is excreted by the kidney. Therefore, patients with congestive heart failure and renal impairment excrete procainamide more slowly, and this slow excretion facilitates cumulative effects of the drug during chronic administration.

Symptoms have developed in most cases after 3 to 21 months of continuous administration, with the total dose of procainamide varying from 14 gms. to 3600 gms. It is important to recognize that while approximately 50 to 75 per cent of patients taking a conventional dose of procainamide for at least two months will develop a positive ANA, only a minority will develop the lupus syndrome.[5]

Patients with procainamide-induced SLE usually present with rheumatic complaints, most commonly myalgias. In addition, a striking incidence of pleuropneumonic involvement is noted, occurring in about 30 per cent of patients.

Hydralazine (Apresoline)

Hydralazine was introduced in 1952 as an antihypertensive agent, and within three years nine instances of a lupus-like syndrome had been reported. Approximately one per cent of the patients taking hydralazine will develop lupus-like symptoms, but not all will develop a syndrome that fulfills the criteria for making a diagnosis of SLE. It has been taught that patients who develop a hydralazine-induced lupus must take at least 400 gms. of the drug. Alarcon-Segovia *et al*, however, have demonstrated a variable susceptibility with approximately 30 per cent of the patients in their series developing elements

of the syndrome on less than 200 mg. per day with the duration of therapy ranging from four days to eight years.[6]

Experimentally, antinuclear antibodies have been produced in animals by injections of hydralazine, and complexes of hydralazine with deoxyribonucleic acid have been found. This binding generates antibodies first to hydralazine, then to the nucleic acids, thus leading to an ongoing immune reaction.

Hydralazine is metabolized mainly by hepatic acetylation. Enzyme studies have divided the general population into "fast acetylators" and "slow acetylators." It is from the group of slow acetylators that most cases of hydralazine-induced SLE come. This may be so, because slower metabolism allows more interaction of the drug with available nucleoprotein.

Isoniazid (INH)

Isoniazid, first introduced for the treatment of tuberculosis in 1952, is classified by most authors as an agent which has a moderate potential for inducing the lupus-like syndrome. In 1961, the first case of a possible isoniazid-induced lupus syndrome was reported.[7] In the reported cases the daily doses ranged from 300 to 900 mg. per day with the symptoms appearing after one to 14 months of continuous therapy.

In experimental situations, isoniazid, like hydralazine, is capable of inducing the formation of antinuclear antibodies. However, the production of the antinuclear antibodies does not necessarily equate with the production of the SLE syndrome. As noted with procainamide, more patients will develop a positive ANA than will develop the SLE syndrome.

Oral Contraceptive Agents

Oral contraceptives have been reported to induce lupus-like syndromes with positive ANA and a high percentage of positive LE cells in the blood.[8] A number of prospective studies, however, also have failed to show induction of ANA by these agents. Furthermore, other authors indicate that rheumatic complaints without other evidence of SLE are not uncommon in patients taking these hormonal combinations.[9] Several cases of established SLE have had a flare of disease activity while taking these agents. Whether oral contraceptives can cause drug-induced lupus or not remains unproved.

Anthony G. DiBartolomeo, M. D., Assistant Professor of Medicine, Division of Rheumatology.

The development of drug-induced SLE is determined by differences in host susceptibilities and by pharmacologic and immunogenic properties of the several drugs involved. The production of drug-induced SLE appears to be due to the ability of the drugs in question to form complexes with deoxyribonucleoprotein released through normal cell lysis. These drug-nucleoprotein complexes then stimulate the formation of antibodies which, in some individuals, go on to produce symptoms of immune complex disease.

An occasional patient with drug-induced SLE will have a more serious manifestation of the disease with pericardial effusion, and even cardiac tamponade. In these patients, treatment with moderate-to-large doses of corticosteroids may be necessary in addition to discontinuing the offending drug. However, most patients can be managed with aspirin or one of the other nonsteroidal anti-inflammatory agents.

The so-called "lupus diathesis," or latent idiopathic SLE being activated by the drug, has been used to explain many of those cases in which the symptoms of immune-complex disease do not clear when the drug is withdrawn. It seems possible that with commonly used medications an occasional individual with asymptomatic SLE may have his disease activated by the drug. However, SLE is relatively rare, so it seems unlikely that the "lupus diathesis" can explain the vast majority of the cases of the drug-induced syndrome. Those patients whose disease does not resolve upon withdrawal of the drug cannot, by definition, be considered examples of the syndrome.

Drug-induced SLE closely resembles "natural" SLE, but differs from the idiopathic disease in race and sex distribution, in low incidence of renal involvement, and in two very important serologic findings: a low incidence of antibody to double-stranded DNA, and lack of evidence for the consumption of serum complement (Table 3). It is these distinctions in the immunologic findings that appear to account for the important differences between the clinical manifestations of the idiopathic and the drug-induced forms of SLE.

Summarizing, in certain individuals who are genetically susceptible, autoantibodies and immune-complex disease can be evoked either by unknown causes or by one of a number of drugs. In the case of the drug-induced form, the disease eventually disappears upon withdrawal of the medication. In the cases with an unknown etiologic agent, immunostimulation apparently does not stop, and an ongoing serious disease, SLE, is generated.

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 1/2 by 11 in.) white paper. Wide margins (at least 1 1/4 in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

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A message from . . .

The President

THE FORGOTTEN MAN

It is reassuring to note that the Federal planners are taking a softer look at National Health Insurance for the present. One factor that has tempered their tone is the horrendous cost of Medicare and Medicaid in recent years. No one can even guess at the administrative cost involved. But it has apparently occurred to someone that socialized medicine would surely bankrupt this country as it has England and other nations in Western Europe unless—and here is the horrible truth—all medical services were downgraded to the point that they could be purchased with the Federal dollar.

Now, the "Forgotten Man" is the healthy person—the individual among the 60 or 75 per cent of our population who never needs more than a few aspirin and eight to 10 hours of rest for a bad cold. Senator Kennedy would have us believe that every American needs $600 worth of medical care a year. Well, the "Forgotten Man" would surely be his brother's keeper. And this is the *only* insurance aspect of National Health Insurance.

I hope we can hear from the "Forgotten Man" or "Woman" soon.

John J. Mahood

JOHN J. MAHOOD, M. D., *President*

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EDITORIALS

PSYCHIATRIC PROBLEMS

Psychiatrists get nervous and depressed as they pick up the crumbs and leftovers from the medical insurance fiscal table. Some might say they get "paranoid" over the discrimination directed at them and their patients in the Medicare system. "Why," they ask, "Why are we the only ones singled out for limited yearly outpatient and lifetime benefits under the Program?" Their anxiety level has reached new heights as they have examined each new national health insurance program introduced in Congress. With one exception, each has continued the discriminatory treatment of them and their patients.

The one exception is the AMA bill, *The Comprehensive Health Care Insurance Act of 1977* (HR 1818). The response of psychiatry to HR 1818 is curious, but understandably human. They are pleased, of course. And yet they are mistrusting, unbelieving. "There must be a trick," is their attitude. Having been kicked, abused and degraded by everyone else, they almost feel that more of the same is their due.

But there is no trick. In its provisions HR 1818 simply treats a psychiatrist the same as any other physician and his patient the same as any other patient. The bill does, however, limit reimbursement for any treatment to that provided by or done under the direct supervision of a physician.

This provision goes directly to the early trauma which has been troubling Psychiatry and the reason insurance actuaries have hesitated to include full coverage for mental illness. The difficulty began many years ago when Psychiatry, for misguided but humanistic reasons, accepted and promoted the euphemistic notion that rather than treating mental illness, psychiatrists were dealing in mental health. This is, of course, untrue. Psychiatrists deal in mental health to the same extent that surgeons deal in surgical health.

As a result of the changed emphasis from mental illness to mental health, others who, like psychiatrists, also talked to people and sometimes made them feel better or worse, began referring to themselves as Mental Health Professionals. They gratuitously included psychiatrists among themselves and very democratically assigned equal status and importance to everyone. To its discredit Psychiatry initially did nothing to counter this unsound move which has resulted in no benefit to the mentally ill and some substantial harm to the specialty of Psychiatry.

What actually occurred was a dilution of medical resources available to the mentally ill as those resources were spread over a broad continuum of conditions ranging from manic and catatonic psychoses down through suicidal depressions, neuroses, character disorders, cultural conflicts, marital problems, social problems, criminality, problems of living and just plain difficulties.

It was easy enough for psychiatrists to involve themselves in all of these areas for their work with individual patients frequently touches on matters relating to all of them. Besides, it was just a little flattering for a psychiatrist to be held up as some sort of an oracle in all of these areas. But Psychiatry failed to note and made no distinction as to when psychiatrists were treating mental illness and when they were simply attempting to influence something else.

Insurance actuaries soon noted, however, that the Mental Health Professionals began making demands for coverage under medical care insurance as independent providers. This was alarming to them for they at least knew their jobs and recognized that their resources would have to be infinite to cover the virtually limitless conditions

that might be included under the care of psychologists, social workers, pastoral counselors, marital counselors, family counselors, mental health workers, child development counselors, geriatric counselors, counselors ad infinitum. Thus the discrimination in medical insurance coverage for psychiatrists and their patients.

Psychiatry has now seen the light and appears to be returning to the bosom of Medicine. It is attempting to disengage itself from the long train of hangers-on which it has been dragging behind itself. To do so it must clearly define what a psychiatrist is and what he does that is different from those who would cling to his coattails. Medicine must assist Psychiatry in delineating and categorizing those conditions requiring the services of a physician. These then can be included under the table of benefits in any medical care insurance plan.

The designation of social problems and general problems of living as medical conditions is nonsensical. To compensate under medical care programs those who counsel people so afflicted makes less sense than to include faith healers, bone setters, shamans, witch doctors or masseurs under the same program. The latter group at least has clients who presumably present themselves with some physical or somatic complaint. All might have something to offer but all are simply inappropriate to be included under medical care programs. If public or private funds are to be made available for relief of non-medical conditions, new and separate programs must be devised.

PARKINSON'S DISEASE AND LEVODOPA

The condition known as paralysis agitans (or Parkinson's disease) was first described by James Parkinson in 1817. It is indeed a serious neurological disturbance and presumably more than a million people in the United States are afflicted with this disorder. For almost 100 years preparations used for therapy of Parkinson's disease consisted largely of belladonna alkaloids. In 1967, Cotzias *et al*[1] reported that an improvement occurred in Parkinson's disease when large oral doses of racemic dopa were administered. This therapy came into general use in the United States in 1970, and since that time thousands of patients have benefited from its therapeutic effects.

There is sound evidence that in Parkinson's disease there is a severe depletion of dopamine in certain parts of the basal ganglia of the brain, especially in the caudate nucleus and putamen (corpus striatum). The administration of levodopa (L-dopa), after it is metabolized to dopamine, reduces the deficiency and in this way produces its therapeutic effects.

Recently, Sweet and McDowell[2] reported a study on 100 patients who had received levodopa over a five-year period; they had started taking it before the end of 1968. There were 68 men and 32 women, all advanced in years. Levodopa was administered orally in doses of 500 milligrams per day and this dose was gradually increased during the next three or four months. In the space allotted only a short summary will be given of the observations reported by Sweet and McDowell.

In essence, 32 patients died before the end of the five-year period, and none of them had stopped taking levodopa before death. Forty-seven patients are still taking levodopa and half of them are at least 25 per cent better than at their pretreatment evaluation. The authors stress, however, that in some patients major adverse effects appear; among these are involuntary movements, postural instability, and disturbed mental states.

The authors conclude that despite the fact that levodopa does not cure Parkinson's disease, the preparation provides symptomatic relief for a prolonged time and remains the single most effective medication for this illness. This conclusion is gratifying, but it is a pity that a cure thus far has not been found for Parkinson's disease. It is to be hoped that eventually a preparation will be discovered which will either prevent or cure this grave and distressing condition.

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Students Receive $7.8 Million From AMA-ERF In 1976

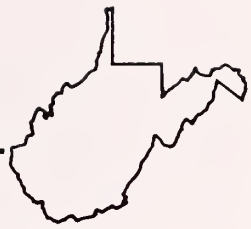
Approximately 6,000 Medical Students and physicians-in-training borrowed $7.8 million in 1976 from the American Medical Association Education and Research Foundation student loan program to help meet medical education expenses, the AMA-ERF reported recently.

Loans to medical students (5,055) accounted for 91 per cent of all loans made through the AMA-ERF program last year. Since the program began in 1962, more than $77 million in loans have been arranged and guaranteed by the AMA-ERF.

Largest volume of student loans in 1976 originated from Columbia University College of Physicians and Surgeons, New York City, and Georgetown University and Howard University, Washington, D. C.

Approximately $1,180,000 in unrestricted grants will be distributed by the AMA-ERF to medical schools this year as a result of fund-raising activities in 1976.

GENERAL NEWS



Workshop For Component Societies On Annual Meeting Program

A workshop for component medical society officers will be conducted by the State Medical Association staff on Saturday morning, August 27, during the Association's 110th Annual Meeting (August 24-27) at The Greenbrier in White Sulphur Springs.

Beginning at 10:45 A.M., the workshop will conclude the third general session and will follow a scientific address on dermatology and a speaker who will discuss income and estate tax planning (to be announced).

"Unity Through Communication and Cooperation" will be the workshop theme.

Dr. John J. Mahood of Bluefield, President of the State Medical Association, will preside.

All physicians—especially the president, secretary and treasurer of component societies—are being urged to attend by Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee.

"We hope that our component society officers will be preparing questions and suggestions for the workshop," Doctor Bell said.

The workshop, in part, is designed to determine how the headquarters staff can better inform component societies of pertinent Association activities and help them with their problems.

"An example of one of the many things we hope to accomplish through the workshop is to exchange ideas among societies," said Charles R. Lewis, the Association's Executive Secretary. "One society already has suggested that we create a mechanism to allow for an interchange among local societies relative to program ideas and any other ideas or suggestions which would be of common interest to component societies."

The headquarters staff, in turn, will offer suggestions for better communication and increased assistance from component societies. Expected to come up for discussion are:

The need for all component society constitutions and bylaws to be on file in the headquarters office; one-on-one legislative contacts by local society members; the proper collection and remittance of dues; the reporting of society meetings for use in *Journal* stories; visits from the Association president, executive secretary and others; and the need in the headquarters office for a breakdown of specialties of local society members for use in answering telephone inquiries.

Other Program Plans

It was announced previously that prominent physicians will present papers concerning the multiple-trauma patient, psychiatry, and venereal disease during the first and second general sessions on Thursday and Friday mornings. Additional speakers will be announced in upcoming issues of *The Journal.*

The Medical Association's Council will hold its regular pre-convention meeting on Wednesday morning. The first session of the House on Wednesday afternoon will be followed on Saturday afternoon, August 27, by the second and final House session.

Sections and societies affiliated with the Association are scheduling breakfast and other scientific and business meetings on Friday and Saturday.

Wheeling Division/WVU To Hold 'Medicine Day' Conference

A "Medicine Day" conference on "Differential Diagnosis of Chest Pain" and "Coronary Artery Disease" will be held by the Wheeling Division/West Virginia University School of Medicine on May 7 at the Ohio Valley Medical Center in Wheeling.

The conference will open at 8:55 A.M. with a welcome from Howard B. Sauder, M. D., Department of Medicine, OVMC.

The speakers and their topics during the morning session will include:

"Neuromuscular Etiologies Cervical Root Syndrome"—Henry L. C. Kettler, M. D., Department of Neurology, OVMC; "Thoracic Outlet Syndrome"—Herbert E. Warden, M. D., Professor and Vice Chairman of Surgery, WVU; "Pulmonary Embolism"—B. A. Bercu, M. D., Professor and Chairman of Medicine, Wheeling Division/WVU;

"Esophageal Etiologies"—Thomas E. Chvasta, M. D., Clinical Associate Professor, Wheeling Division/WVU; "Aortic Valvular Disease—IHSS"—Robert J. Marshall, M. D., Department of Medicine, St. Mary's and Cabell-Huntington hospitals, Huntington; "The Mitral Valve Prolapse Syndrome"—R. G. Stevenson, M. D., Department of Medicine, OVMC;

"Coronary Artery Disease"—Doctor Sauder; and "Angina Pectoris with Normal Coronary Arteries"—D. F. Phillips, M. D., Division of Cardiology, Cleveland Clinic.

The morning session will conclude with a panel discussion moderated by Albert M. Valentine, M. D., Department of Medicine, OVMC.

The afternoon session will include:

"The Role of Stress Testing in the Differential Diagnosis of Coronary Artery Disease"—Allen F. Bowyer, M. D., Professor of Medicine, Division of Cardiology, WVU; "The Role of Coronary Arteriography in the Differential Diagnosis of Coronary Artery Disease"—Doctor Phillips;

"Echocardiography and Coronary Artery Disease" —Doctor Bowyer; "Medical Therapy of Coronary Artery Disease"—Doctor Marshall; and "Surgical Therapy of Coronary Artery Disease"—Doctor Warden.

The conference will conclude at 4:30 P.M. following a panel discussion moderated by R. U. Drinkard, M. D., Department of Medicine, OVMC.

The program meets the criteria for eight credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association—and has been approved for eight hours of prescribed credit by the American Academy of Family Physicians.

The registration fee (including lunch) is $35 for physicians and $15 for graduate nurses, with no fee for residents, interns, medical students and student nurses.

For additional information contact William G. Gardner, M. D., Director, Continuing Education, Wheeling Division/West Virginia University School of Medicine, 2000 Eoff Street, Wheeling 26003 (Telephone (304) 234-8363 or 234-8827).

Bronco Junction Allergy Course Approved For CME Credit

A physicians' one-week intensive course in allergy-immunology to be held this summer in conjunction with Camp Bronco Junction has been approved for credit by the Subcommittee on Continuing Medical Education of the Charleston Area Medical Center.

The course has been approved, as part of CAMC's continuing education program, for 50 credit hours in category 1 of the American Medical Association Physician's Recognition Award, it was announced by the subcommittee.

Bronco Junction, the camp for children with bronchial asthma, is located at Red House. The course will be offered during each week of the camp, which will be held June 19-August 14.

The course also has been approved for 50 hours of elective credit by the West Virginia Chapter, American Academy of Family Physicians.

For additional information, contact Merle S. Scherr, M. D., 805 Atlas Building, Charleston 25301 (telephone (304) 343-5427 or 343-5472).

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. N. LeRoy Lapp, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

May 7	Medicine Day—Coronary Artery Disease	Wheeling
May 27	Jackson General Hospital Visiting Physician Program	Ripley
June 3, 4	Fourth Annual White Water Surgery Conference	Charleston
June 13-18	School of Alcohol and Drug Abuse Studies	Morgantown
June 18	Anesthesia Update '77	Morgantown

Association Approves St. Mary's Hospital CME Program

The continuing medical education program of St. Mary's Hospital in Huntington has been reaccredited by the State Medical Association through its Committee on Medical Education and Hospitals.

The program was granted a full, three-year approval effective March 23, 1977, the expiration date of the hospital's previous two-year provisional accreditation.

The site survey was conducted at the hospital on February 16 by Dr. T. Keith Edwards of Bluefield.

Meanwhile, a site survey was held in Parkersburg March 30-31 for the Mid-Ohio Valley Continuing Medical Education Committee (Camden-Clark Memorial Hospital, St. Joseph's Hospital Center and the Parkersburg Academy of Medicine). The results of this CME survey will be announced in the near future.

Surgery Conference Scheduled June 4 In Charleston

The Fourth Annual Surgery Conference will be held on June 4 in Charleston by the Charleston Division/West Virginia University Medical Center and the Charleston Area Medical Center.

Alvin L. Watne, M. D.

C. B. Esselstyn, Jr., M. D.

The conference site will be Room 101 of the CAMC Administration Building, 1210 Elmwood Avenue.

Registration will begin at 8 A.M., followed by a welcome from Dr. Thomas W. Mou, Dean of the Charleston Division/WVU; and an introduction by the conference chairman, Dr. Bert Bradford, Jr., Department of Surgery, CAMC.

The speakers and their topics will include:

"Surgical Wound Infections and Intestinal Flora" —Alvin L. Watne, M. D., Professor and Chairman of Surgery, WVU Medical Center, Morgantown; "Changing Concepts in Vascular Surgery"—Norman Hertzer, M. D., Department of Vascular Surgery, Cleveland Clinic Foundation;

"Individualization in Surgical Treatment of Gastric Cancer"—Stanley O. Hoerr, M. D., Director of Surgery, Fairview General Hospital, Cleveland; "Biliary Tract Problems"—Robert E. Hermann, M. D., Department of General Surgery, Cleveland Clinic Foundation;

"Hiatus Hernia Management"—Charles G. Watson, M. D., Professor of Surgery, University of Pittsburgh School of Medicine; and "Ongoing Role of the Surgeon in Thyroid Disease"—Caldwell B. Esselstyn, Jr., M. D., Department of General Surgery, Cleveland Clinic Foundation.

The conference will conclude at 12:30 P.M. following a panel discussion by the faculty and questions and answers. Dr. Donald R. Cooper, Professor and Chairman of Surgery, The Medical College of Pennsylvania, Philadelphia, will be the moderator.

The program meets the criteria for three hours of Category 1 credit toward the American Medical Association Physician's Recognition Award.

The conference also is sponsoring a Whitewater Expedition, limited to 50 registrants, on New River, from Prince to Thurmond, on Friday, June 3. The fee for the expedition is $40.

The conference fee is $10 for physicians and nurses, with no fee for residents and students. Registrations and checks, which should be payable to WVU Foundation, Inc., may be sent to Conference Coordinator, Charleston Division/WVU Medical Center, P. O. Box 2867, Charleston 25330.

Registration is requested by May 30.

State Anesthesiologists Plan Annual June Meeting In Morgantown

"Anesthesia Update '77" will be conducted as the West Virginia State Society of Anesthesiologists holds its annual meeting on June 18 at the Lakeview Inn and Country Club in Morgantown.

The program will begin with registration at 8 A.M. on Saturday, June 18, followed by a welcome from Richard B. Knapp, M. D., Professor and Chairman, Department of Anesthesiology, West Virginia University School of Medicine.

The morning speakers and their topics will include:

"Patterns of Respiratory Support"—Jerome H. Modell, M. D., Chairman, Department of Anesthesiology, University of Florida College of Medicine, Gainesville; "Monitoring in the Operating Room"—Joachim Gravenstein, M. D., Chairman, Department of Anesthesiology, Case Western Reserve University, Cleveland;

"All About Blood Transfusion"—C. Paul Boyan, M. D., Chairman, Department of Anesthesiology,

Bronco Junction, the camp for children with bronchial asthma, which is located at Red House, recently shared its birthday cake with children in the Pediatric Section of the Memorial Division of the Charleston Area Medical Center. From left (standing), are Mrs. Bettie J. Burdette, Director of Nursing of the CAMC Memorial Division; camper Tammy Anderson, St. Albans; Janet Morton, Bronco Junction's chief nurse; and pediatric patients (foreground). The milk-free, wheat-free, egg-free cake, featuring "Bernie," the camp operating train, was prepared by Marge Nunley, Bronco Junction's food service director. The eight-week intensive care and rehabilitation camp is sponsored by Allergy Rehabilitation Foundation, Inc.

Medical College of Virginia Hospitals, Virginia Commonwealth University, Richmond; and "Pharmacology of Beta Blockers"—Robert G. Merin, M. D., Associate Professor, Department of Anesthesiology, The University of Rochester, Rochester, New York.

WVU faculty members and their topics scheduled for the afternoon are "The Effects of Acutely Raised Intracranial Pressure on Pulmonary Haemodynamics"—Michael B. Howie, M. D., Assistant Professor, Department of Anesthesiology; "Arrhythmic Potential of Benzquinamide"—David Smith, Ph. D., Associate Professor, Department of Anesthesiology; and "Cardiopulmonary Effects of Alprazolan—A New Oral Premedicant"—William H. Hess, M. D., Assistant Professor, Department of Anesthesiology.

The afternoon session also will include a roundtable discussion with the speakers, and a WVSSA business meeting, conducted by Jeanne Rodman, M. D., of Morgantown, WVSSA President.

The meeting will conclude with a dinner session, at which the speaker wil be Paul Davidson, M. D., Associate Professor, Department of Medicine, WVU. His topic will be "Wild Water West Virginia."

The registration fee will be $35 for practicing physicians and $15 for practicing nurses, with no fee for house staff and students. There will be a charge of $5.50 for lunch and $10 for dinner. Checks, which should be payable to the WVSSA, may be mailed to: Rena Pastoria, Department of Anesthesiology, WVU Medical Center, Morgantown 26506.

The program has been approved for credit by the American Academy of Family Physicians—and for category 1 credit toward the Physician's Recognition Award of the American Medical Association. CEU credits also will be awarded.

Reservations at Lakeview should be made before June 1.

For additional information contact Doctor Knapp (telephone (304) 293-5411).

Doctor Esposito To Receive Ophthalmology Award

Dr. Albert C. Esposito, Huntington ophthalmologist, will receive the Award of Merit from the American Academy of Ophthalmology and Otolaryngology for his services to the Academy, medicine and its educational programs.

The award will be presented on October 3 during the Ophthalmology Scientific Session at the Academy's meeting in Dallas.

Doctor Esposito, a Past President of the State Medical Association, is a member of the West Virginia House of Delegates from the 11th District (Cabell County).

Penicillinase-Producing Gonorrhea Strains (PPNG) Alert Issued

Editor's Note: Following is the text of a recent memorandum to practicing physicians by State Health Director N. H. Dyer, M. D., regarding Penicillinase-Producing Gonorrhea Strains (PPNG). The Department's Bureau of Venereal Disease Control reports that the PPNG organism has now been isolated from a West Virginian.

Strains of N. gonorrhoeae which produce penicillinase and which are resistant to therapeutic levels of penicillin have been isolated in the United States and several other countries. Many of the 100 or so cases isolated in this country have been traced back to the Philippines. A number of public health authorities feel the stage is set for a major setback in the control of gonorrhea if medical professionals don't become acutely aware of this threat and consider PPNG in the management of each gonorrhea patient. The West Virginia State Department of Health is providing the following management guidelines to assist the physician protect his patient and his community from the spread of "Beta-lactamase" N. gonorrhoeae.

Guidelines:

1. All non-penicillin allergic patients with gonorrhea (males: smear + and/or culture positive; females: culture +) should receive aqueous procaine penicillin G-4.8 million units I.M. with 1 gm. of probenecid by mouth as initial treatment (per P.H.S. recommendations).
2. Patients should return in 3-5 days for a test of cure.
3. Patients who have a positive test of cure culture (or males with intracellular gram negative diplococci on gram stain of urethral discharge—culture still needs to be taken) should be treated with spectinomycin 2.0 gm. I.M. The culture should be sent to the State Hygienic Laboratory for PPNG testing. Only through culturing can the "Beta-lactamase" organism be isolated. Media for this purpose are available through the county health department. Be particularly suspect of any infected patient who has recently been to the Far East or has had sexual contact with someone recently visiting that area of the world.
4. Test of cure culture specimens from males treated for PPNG should be secured for all patients, symptomatic and asymptomatic. (Urethral cultures from asymptomatic men should be obtained using either a calgiswab or sterile wire loop, *not* a cotton-tipped swab.)
5. Test of cure examinations for females who have PPNG should include culture specimens secured from the endocervical *and* anal canals.
6. All patients with PPNG should be recultured at one- and three-month intervals after negative test of cure cultures has been obtained.

7. Strong consideration should be given to PPNG-testing patients who are gonococcal repeaters and chronic gonococcal PID problems.
8. Indepth contact interviews should be conducted and contact follow-up accorded the highest priority. Interstate contacts of PPNG cases should be telephoned toll free to 1-800-642-8244 for confidential follow-up. Please designate PPNG contacts. West Virginia contacts can also be called to this number or the local health department.
9. West Virginia contacts to PPNG should be cultured and receive epidemiological treatment with spectinomycin immediately. This statement should in no way change the pronounced drug of choice (aqueous Procaine Penicillin G 4.8 million injectable in one session) for treating gonorrhea unless there is strong indication that PPNG is involved.

Please contact the Bureau of Venereal Disease Control should you have further questions regarding PPNG or other matters related to venereal disease.

Fourth Annual Newborn Day Held In Charleston

The Fourth Annual Newborn Day, a conference on "Respiratory Problems in the Newborn," was held in Charleston on March 25.

The conference was sponsored by the Department of Pediatrics, Charleston Area Medical Center; and the Charleston Division/West Virginia University Medical Center.

The one-day program consisted of 10 scientific presentations in "newborn" subject areas such as hyaline membrane disease, CPAP, anesthesia for surgical emergencies, enhancement of pulmonary maturation, radiologic evaluation of respiratory problems, apneic spells, ventilatory management, and postoperative respiratory care.

Participants were welcomed by Dr. Herbert H. Pomerance, Professor of Pediatrics, Charleston Division/WVU, and Director of Pediatrics, CAMC. Doctor Pomerance also was moderator for the evening session during which Dr. Leo Stern of Providence, Rhode Island, spoke on "Patterns of Maternal and Child Care Among the Bedouins." Doctor Stern is Chairman of Pediatrics, Brown University Division of Biology and Medicine; and Pediatrician-in-Chief at Rhode Island Hospital in Providence.

Other members of the guest faculty were Russell C. Raphaely, M. D., Associate Professor of Anesthesiology, University of Pennsylvania; and Director, Pediatric Intensive Care, Children's Hospital of Philadelphia; Robert H. Usher, M. D., Associate Professor of Pediatrics, McGill University; and Physician-in-Chief, Neonatology, Royal Victoria Hospital, Montreal; and Thomas J. Williams, B. S., A.R.R.T., Instructor, Continuing Care, Department of Respiratory Care, Loma Linda University Medical Center; and Clinical Specialist, Bourns, Inc. Life Systems Division.

11 Of 13 WVU Family Practice Grads To Stay In State

Do Keyser, Kingwood, Morgantown, New Martinsville, Princeton, Richwood, St. Marys, Vienna, Wheeling and Winfield have something in common?

"Yes," explains Dr. John W. Traubert, Chairman of the West Virginia University Medical Center's family practice residency center, "the first graduates of a unique three-year program that has made them specialists in the field of family medical care."

By July 1, all of the young doctors—all under 30—will have opened their new offices in the 10 West Virginia communities. There are 51 others in various stages of training in family practice centers in Clarksburg, Morgantown, South Charleston and Wheeling. A similar effort will be opened later this year in Huntington.

During the three-year residencies, trainees actually treated a growing number of patients under supervision of medical practitioners. Other hours were spent in studying various procedures—from internal medicine to surgery—and getting hints on medical economics.

All of the doctors are certified by the American Board of Family Practice. To retain that medical specialty certification they will take additional tests in six years.

Helps End Doctor Shortage

"This is the profession's first contribution toward ending the shortage of doctors in West Virginia," Doctor Traubert explained. "These young and highly trained family physicians are accepting the challenge and responsibility of providing essential care in smaller community surroundings."

The doctors and the communities in which they are establishing medical practices are:

David Chapman, Keyser; Dale Luketich, Kingwood; Thomas Clark, Hugh Lindsay and Wilbur Sine, Morgantown; Donald A. Blum, New Martinsville; D. Dean Patton, Princeton; William L. Harris, Richwood; Michael L. Lewis, St. Marys; Ernest Bonatatibus, Wheeling, and Richard D. Hayes, Jr., Winfield.

David Nesselroade of Vienna is delaying the beginning of his practice until 1979 in order to join an Indian Health Service undertaking in the West. Herbert Wilsker is returning to Pennsylvania to begin practice in Lancaster.

State Heart Association To Meet May 20-21, South Charleston

The 1977 annual meeting of the American Heart Association, West Virginia Affiliate, will be held May 20-21 in South Charleston at the Ramada Inn.

Registration and exhibit review will begin at 1 P.M. on Friday, May 20, followed by "Show and Tell" sessions by divisions and units, beginning at 1:30; and orientation of new delegates, beginning at 3:45.

Mayor Richard Robb of South Charleston will welcome members of the General Assembly, which will begin at 4 P.M. Annual reports will be presented by Howard B. Sauder, M. D., of Wheeling, President; Mrs. Jo Fultz, R. N., Clarksburg; and Charles E. Sikorski, Charleston, Executive Director of the West Virginia Affiliate. Board members and officers will be elected.

Congressman John M. Slack, Jr., of West Virginia will be the speaker at the Friday dinner session.

The general membership education and scientific meeting will begin at 8:50 Saturday morning, with the following speakers and topics:

"Basic Introduction to the WVHA CPR Program" —Richard B. Knapp, M. D., Morgantown; "Report on the Basic CPR Pilot Program in Charleston"—Mrs. Caroline Webb; "WVHA Advance Life Support Program in CPR"—Bernadette R. Page, M. D., Beckley; and "Progressive Cardiac Care in the Hospital"—Leonard M. Eckmann, M. D., South Charleston.

Harry I. Johnson, Jr., M. D., of Roanoke, Virginia, Chairman of the AHA Mid-Atlantic Regional Heart Committee, will be the speaker for the annual awards luncheon on Saturday.

The Saturday afternoon program will include:

"Thrust of the National High Blood Pressure Program and Roadblocks to Patient Compliance"—Robert Bachman, Program Development Staff, National High Blood Pressure Education Program, Bethesda, Maryland; "Basic Introduction to WVHA High Blood Pressure Program"—Robert D. Whitler, Charleston, Chairman, Hypertensive Screening Committee; "Comment on the Joint National Committee on Detention, Evaluation and Treatment of High Blood Pressure"—Harold Selinger, M. D., Charleston; and "Dietary Cholesterol: Fact or Fiction?"—S. J. Jagannathan, Ph. D., West Virginia University.

Respiratory Care Symposium Planned In Parkersburg

The Fifth Annual Respiratory Care Symposium will be held on Saturday, June 4, in Parkersburg at the Holiday Inn. The sponsors are the West Virginia Society for Respiratory Therapy, and the West Virginia Lung Association.

The speakers and other program details are to be announced.

There will be a fee of $10 for WVSRT members, $13 for non-members, and $7 for students. For additional information contact Russell Howard, R.R.T., St. Joseph's Hospital, Parkersburg (telephone 304/424-4457).

Medical Meetings

May 3—Recent Developments in Endocrinology (CAMC & Charleston Division/WVU Med. Center), Charleston.

May 5-7—W. Va. and Southwestern Pa. chapters, ACS, White Sulphur Springs.

May 8-9—Am. Otological Society, Boston.

May 9-11—'Great Teachers' Conference (Am. Heart Assn.), White Sulphur Springs.

May 15-18—Am. Thoracic Society, San Francisco.

May 15-19—Ohio State Medical Assn., Columbus.

May 20-21—Am. Heart Assn., W. Va. Affiliate, South Charleston.

May 25-28—Am. College of Sports Medicine, Chicago.

May 30-June 1—Am. Ophthalmological Society, Hot Springs, Va.

June 4—5th Annual Respiratory Care Symposium (W. Va. Society for Respiratory Therapy/ W. Va. Lung Assn.), Parkersburg.

June 5-7—Am. Diabetes Assn., St. Louis.

June 13-15—Conference on Health Records (Assn. for Health Records), Arlington, Va.

June 16—Post Graduate Session, Tygart's Valley Medical Society, Elkins.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 11-13—ACS, Big Sky, Mont.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 15-16—Medical Society of the District of Columbia, Washington, D. C.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 27-30—Am. Roentgen Ray Society, Boston.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 10-14—Indiana State Medical Assn., Indianapolis.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Nov. 6-9—Southern Medical Assn., Dallas.

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The Role Of Colposcopy In Gynecological Practice

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The shortage of hospital beds and the ever increasing cost of medical care by necessity welcomes any modality which allows delivery of medical care with substantial savings in hospital bed utilization and a decrease in medical cost.

When better utilization and less expensive delivery of medical care can be applied while practicing high quality medicine, then this becomes an ideal set of circumstances.

The proper utilization of colposcopy makes readily available this set of circumstances and it is because of this that we elected to present in this paper our experience with colposcopy.

Historical Background and General Comments

In 1925, Hinselman[1] reported for the first time on the use of colposcopy in the detection of cervical malignancy. This modality uses a system depending on binocular vision which provides magnification of 10 to 40 powers and enables the observer to visualize clearly a variety of changes at the level of the cervical, vaginal and vulvar epithelium. The colposcopist has the opportunity to visualize, under magnification, the appearance of a normal cervical or vaginal epithelium and to contrast it with the appearance of inflammatory or neoplastic changes in these same epithelial surfaces.

While colposcopy had reached great popularity in Europe and South America where it has been used in the last 50 years, it is only in the last few years that this important methodology has reached in this country the status of a "must" in gynecologic practice.

There is no question that the year 1939 was a bad year for colposcopy. It was during that year that Papanicolaou and Trout published their monograph on the exfoliative cytology of the vaginal tract. It was the simplicity and availability of vaginal cytology that somehow relegated the use of colposcopy to few isolated clinics in this country. In a way, it was a question of competitiveness and the smear won. It is, indeed, unfortunate that it was not realized at that time by the profession that colposcopy does not replace cytology nor does cytology replace colposcopy.

These two modalities, by different routes, are aimed at the discovery of early epithelial neoplastic changes. Cytology studies the morphology of stained exfoliated cells, while colposcopy allows the study of tissue changes in vivo.

It is indeed true that a combination of both methods, even if impractical, would yield the best result (Table 1). This had been shown by many, among whom are Navratil[2] and Limburg.[3]

Until recently, the classical approach to the management of a patient with suspicious or positive cytological exam was the performance of a cold-knife conization of the cervix. This approach has implied with it certain definite complications as seen in Table 2.

When considering the performance of a cold-knife conization for a suspicious or positive pap

TABLE 1
Accuracy in Cancer Detection

	Cytology %	*Colposcopy* %	*Both* %
Navratil Graz, Austria	88.5	91.3	99.7
Limburg Hamburg, Germany	88.9	97.2	99.3

TABLE 2

Problems Encountered With Cold-Knife Conization

1. General problems
   A. Anesthesia
   B. Hospitalization and cost
2. Problems with non-pregnant female
   A. Establishment of infertility due to lack of cervical mucous
   B. Causative factor in incompetent cervical os
   C. Bleeding
   D. Dystocia due to cervical scarring
3. Problems in the pregnant female
   A. Bleeding
   B. Amnionitis
   C. Abortion
   D. Premature labor

smear, one must keep in mind a number of problems encountered with this procedure.

First, there are general problems to be considered such as the requirement of an anesthetic and the amount of hospitalization with its associated cost that the procedure would necessitate.

There are, however, problems which are of greater significance than the ones above mentioned and they deal with complications which might take place in the patient who has a conization performed. These complications may be broadly subdivided into complications occurring in the non-pregnant female and complications occurring in the pregnant female.

Non-pregnant female: Looking at the non-pregnant female, one must keep in mind the problems of postoperative bleeding, at times severe enough to necessitate blood transfusions and an additional anesthetic to suture the bleeding site. One must consider the fact that a conization might remove such a large amount of cervical tissue as to completely abolish or markedly decrease the production of cervical mucous, thus creating a factor of infertility in the patient who desires further pregnancies.

Another complication is the role of the cold-knife conization in the etiology of the incompetent cervical os. Last but not least, in the patient who has had a cone, there might be marked scarring which might cause some degree of dystocia during labor.

Pregnant female: One must keep in mind the possibility of bleeding at the time of actual performance of the conization. Also, the possibility of amnionitis or abortion as a consequence of the procedure should not be dismissed and, when this procedure is done in the late second trimester or third trimester, the occurrence of premature labor is a possibility.

Other methods utilized by some in the evaluation of abnormal cytology are the performance of ring biopsies or random punch biopsies. These two methods of investigation of patients with abnormal cytology are to be condemned. A comparison between various methods of investigation of abnormal cytology are summarized in Table 3.

The establishment of cryosurgery as a method of treatment in intraepithelial neoplastic lesion of the cervix is an additional reason which ideally suggests the relegation of cold-knife cone biopsy of the cervix to selected instances: specifically in those instances in which the examiner cannot, under colposcopy, visualize the lesion and/or outline its boundaries.

Encouraging results have indeed been reported in the management of intraepithelial neoplasia by cryosurgical modalities, but caution is indicated and strongly advised. Dolan[4] has shown an 80 per cent reduction in the number of conizations by the use of colposcopy. Sonek[5] and Ostergard[6] point out that 55 per cent of patients with abnormal cytology may be managed without conization. Ortiz and Newton[7] have reported the advantages of colposcopy in the management of abnormal smears in the pregnant female while Stafl and Mattingly[8] reported the complication rate of conization in pregnancy to be 32 per cent.

It must be pointed out that a colposcopic-directed biopsy resulting in the diagnosis of an invasive carcinoma of the cervix will permit the surgeon to apply immediately those surgical or other therapeutic modalities applicable to the

TABLE 3

Problem patient	Multiple biopsies	Biopsies are at random and accuracy is marginal
	Cone biopsy	Costly $$—needs hospitalization Anesthesia is needed Immediate complication—hemorrhage Late complications: I.C.O. Infertility
	Colposcopy avoids	1. $$ 2. Risk—anesthesia 3. Immediate or late complications 4. Allows best management of case

case, thus avoiding one or two anesthetics, lengthy hospitalization, less morbidity and less cost. It must also be said that the diagnosis of dysplasia and carcinoma *in situ* from a colposcopically-directed biopsy, when the colposcopically-directed biopsy has been taken by someone with skill in the practice of colposcopy, will likewise allow the management of the case without a cone knife biopsy. This is illustrated in Table 4.

At this point, it must be noted that not only patients with abnormal cytology need colposcopy. A good outline of patients needing colposcopy can be appreciated in Table 5.

Cytology is associated with some drawback. This is suggested by the fact that cytology may be misleading if not performed by interested and highly motivated pathologists. Cimber[10] points to the high false-negative rate of reported cytology and Selim[11] reported a 22 per cent false-negative smear rate.

It is most essential that the colposcopist carry on a continuous dialogue with his pathologist. Ideally, the cytological examination should be done by the same pathologist who reads the colposcopically-directed biopsy so that the highest degree of correlation be possible. A smear read by a pathologist on the west coast and a biopsy evaluated by a pathologist hundreds of miles away is not conducive to the best management of the case. These two reports, cytology and histology, must complement each other and slides must be available for review and comparison.

TABLE 4

Colcoscopy	Dysplasia ↘ Carcinoma ↗ *in situ*	Depending on age and parity of patient it allows conservative management: 1. Cryosurgery or definitive surgery 2. Simple hysterectomy
	Invasive Carcinoma	Allows immediate disposition of case: 1. Radium & cobalt 2. Radical surgery

TABLE 5

Patients Who Need Colposcopy

A. Patients at risk for cervical carcinoma
B. Suspicious pap smear, Class II and above
C. DES-exposed females
D. Postirradiation patients
E. Any cervix which looks suspicious regardless of cytology
F. Especially useful in pregnant patients with abnormal cytology or suspicious looking cervices

Colposcopy must, however, be done by experts who realize its limitations as Crapanzano[12] explained: when colposcopy does not explain the cytological findings and when the examination is unsatisfactory, conization is required.

Finally, one must look at colposcopy as the first step in the conservative management of selected patients.

Creasman, *et al*[9] point out clearly how colposcopic examination of abnormal cytology, followed by cryosurgery, may give an acceptable alternative to conization and total hysterectomy in those patients who are either young or with low parity.

There are, however, limitations to the use of colposcopy. The examination must be satisfactory and this is only so when the examiner can clearly visualize the squamocolumnar junction. Also, regardless of his previous training, the colposcopist must have available to him a constant flow of patients for colposcopic examination. The occasional colposcopic examination is not enough to keep the examiner proficient in this modality.

In 15 per cent of examined patients the entire squamocolumnar junction cannot be seen. Dolan, *et al*[4] have reported unsatisfactory colposcopy in 18 per cent of their patients. This presents more of a problem in many postmenopausal patients in whom the junction has been pulled upward inside the cervical canal.

Lastly, it is only fair to say that while colposcopy is not the most practical and desirable screening method available, it is, by far, the best method to study the abnormal smears, especially in the pregnant patient.

Material and Results

Colposcopy has been practiced by the author since 1960; however, for this presentation I elected to present the material documenting a period of one year: March, 1975, through February, 1976. During this year, 169 patients were studied colposcopically by the author. The indications for colposcopy in the study group are outlined in Table 6. The purpose of this

TABLE 6

Indication For Colposcopy In Patients Of Study Group

1. All DES-exposed females
2. All Class III or above pap smears
3. All Class II smears which were either:
   A. Repeats
   B. First Class II without evidence of infection
4. Patients with abnormal cervices or postcoital bleeding regardless of class of pap smear

TABLE 7
Steps In Colposcopic Exam

1. Application of 3% acetic acid
2. Normal light
3. Green filter
4. Lugol application
5. Biopsy of abnormal area
6. Endocervical curettage

paper is not to outline in detail the method of colposcopic examination used by the author, but only to state that during such an examination a certain number of steps are taken (outlined in Table 7).

Epithelial neoplastic abnormalities were found in 115 of the 169 patients examined. Normal epithelium was found in 52 patients and, in two patients, the examination was found to be unsatisfactory.

In reviewing the findings of the 169 patients who underwent colposcopic examination, it is apparent that the greatest concentration of intra-epithelial neoplasia cases were found in patients with a class III pap smear. There were 15 such patients. In three patients with a class III pap smear, the colposcopic-directed biopsy was reported as chronic cervicitis and repeated smears reverted to class I. The class IV smears

TABLE 8
Findings In 169 Patients

Cytology					Dysplasia				Invasive Carcinoma		Other		
Class	Patients	Negative	Unsatisfactory	Chronic Cervicitis With or Without Squamous Metaplasia	Mild	Moderate	Severe	Carcinoma *in situ*	Squamous	Adenocarcinoma	Leukoplakia	Vaginal Adenosis	Herpes
I	21	8		11	1						1		
II	126	42	2	74	4		1	1				1	1
III	20	2		3	1	2	5	5	1	1			
IV	2							1	1				
Total	169	52	2	88	6	2	6	7	2	1	1	1	1

TABLE 9
Management Of Cases In Study Group

Findings at Biopsy	*No. of Patients*	*Treatment*	*No. of Patients*
Chronic cervicitis	88	Cryosurgery	26
		Conization	1
		Vaginal hysterectomy	1
Dysplasia			
Mild	6	Cryosurgery	6
Moderate	2	Conization	1
		Lost to follow-up	1
Severe	6	Cryosurgery	2
		Vaginal hysterectomy	4
Carcinoma *in situ*	7	Vaginal hysterectomy	7
Invasive carcinoma	3	Radiation	2
		Radical hysterectomy	1
Adenosis	11	None	11
Herpes	1	Medical management	1
Leukoplakia	1	None	1

were found to be due to the presence of an invasive squamous cell carcinoma of the cervix (localized in the endocervical canal) and an adenocarcinoma of the cervix in a young woman in the early second trimester of pregnancy.

For the breakdown of the epithelial neoplasia found we refer the reader to Table 8.

A number of patients with a class II cytology was found to have significant intraepithelial neoplastic changes. In fact, there were five cases of dysplasia, one of which was classified as severe and one carcinoma *in situ*. This has reinforced our opinion that all patients with class II Papanicolaou smear are to be studied colposcopically.

Patients with pathological findings were treated as outlined in Table 9. The correlation between the colposcopically-directed biopsy and the final specimen in patients undergoing definitive surgery is readily seen in Table 10.

TABLE 10

Correlation Between Colposcopic-Directed Biopsy and Final Specimen

Colposcopic Biopsy	Final
In Situ 7	*In Situ* 5
	No Residual 2
Papillary Adenocarcinoma Cervix 1	Papillary Adenocarcinoma Cervix 1
Severe Dysplasia 4	Severe Dysplasia 4
Moderate Dysplasia 1	Moderate Dysplasia 1
Chronic Cervicitis 2	Chronic Cervicitis 2

In addition to the above, it must be pointed out that other important gains have resulted from this study. These gains are reflected in Table 11. One hundred, fifty patients were spared one anesthetic; 157 days of hospitalization were avoided; and $58,450 were saved to the health industry.

TABLE 11

Summary

Cases in study group	169
Unsatisfactory exams	2
Patients spared one anesthetic	150
Patients directed to definitive therapy with administration of one anesthetic	17
Hospital days saved	167
$ saved to health delivery system	$58,450
Complications	None

Summary

A brief historical background of colposcopy and its role in gynecological practice has been presented. A group of 169 patients have been studied and the results of these examinations have been discussed and presented in the paper.

Obvious socio-economic and medical advantages will result from the colposcopic examination of a selected patient population.

Colposcopy must become part of the curriculum of residency training programs in obstetrics and gynecology.

Its limitations must be kept in mind and the primary physician must be made aware of the availability of this modality. It is serious business which must be undertaken only by those who, by virtue of their training and as a result of their self-analysis, have reached a level of competence of the highest degree. The early colposcopist must keep accurate data to correlate his colposcopically-directed biopsy with the final specimen as he continues with traditional cervical biopsies. With constant self analysis and proper correlation between the colposcopically-directed biopsy and the traditional biopsy, he can rely on his skill in colposcopy and manage his patients on the basis of his colposcopic examination. To do anything other than this would be unethical, immoral and medically and legally dangerous.

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Acute Ureteropelvic Junction Obstruction By An Aberrant Blood Vessel

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A case is presented where an aberrant blood vessel caused acute complete ureteropelvic junction obstruction necessitating exploration and division of the blood vessel with relief of obstruction.

Obstruction of the renal pelvis by an aberrant renal artery is of common occurrence. Occasionally, significant loss of renal parenchyma occurs secondary to similar obstruction. Herein we describe a case of acute complete ureteropelvic junction obstruction by an aberrant renal artery.

Case Report

R. J. K., a 25-year-old caucasian male was initially admitted through the emergency room on January 30, 1976, with a history of severe, right-sided abdominal pain which was colicky in nature and radiated anteriorly. A presumptive diagnosis of right ureteral colic was made. Intravenous pyelogram showed only a nephrogram of the right kidney (Figure 1). The left kidney appeared normal. The patient became asymptomatic after bed rest and the administration of analgesics. A repeat urogram showed good function on both sides and a filling defect crossing the level of the right ureteropelvic junction which suggested an aberrant renal artery or a band (Figure 2).

The patient was discharged; however, he was re-admitted two days later with a recurrence of the symptoms. An intravenous pyelogram revealed non-visualization of the right kidney (Figure 3). Cystoscopy was performed and a #5F ureteral catheter was introduced without any difficulty. Contrast material was injected then, but it ascended to the ureteropelvic junction only. The catheter was advanced all the

Figure 1. Shows only a nephrogram on the right side at three and one-half hours.

Figure 2. Shows good function on both sides. A band-like filling defect is noted at the right ureteropelvic junction.

Figure 3. IVP shows non-visualization of the right kidney.

Figure 4. Right retrograde ureterogram reveals a sharp cut-off point at the ureteropelvic junction.

way up to the ureteropelvic junction; however, neither the catheter nor the contrast material would pass beyond the point of obstruction (Figure 4).

It was believed that the aberrant renal artery had caused acute angulation of the ureteropelvic junction to the point of complete obstruction. The following day, the patient's right kidney was expored through a flank incision and the aberrant renal artery was found to be the cause of the complete, acute obstruction. This artery was clamped to ascertain the possible area of infarction which appeared to be about two centimeters in diameter. It was decided to divide the renal artery without any danger of a significant loss of renal parenchyma. The artery was divided and almost instantly the renal pelvis seemed to empty. Ureteropelvic junction was felt to be adequate.

Postoperatively, the patient made a satisfactory recovery and is symptom-free to date. His last IVP (Figure 5) showed good function on both sides with some loss of renal parenchyma of the lower pole of the right kidney.

Figure 5. Postoperative IVP shows good functioning on both sides with indistinct lower border of the right kidney suggesting some loss of renal parenchyma of the lower pole.

Discussion

Aberrant renal vessels have been known to cause obstruction of the renal pelvis with resultant pain almost similar to a ureteral colic. This patient's symptoms started while he was moving furniture. Increased intra-abdominal pressure caused the kidney to move down significantly, thereby acutely angulating the ureteropelvic junction over the aberrant renal artery. When the patient relaxed, the kidney apparently returned to its original position and the patient became asymptomatic. The process repeated itself two days later. This time angulation causing the obstruction persisted, necessitating exploration and division of the aberrant renal artery with resultant relief of obstruction and symptoms.

AMA Says Laetrile Still Unproved

The American Medical Association has reaffirmed its position that there is no scientific evidence that laetrile is effective in treating cancer.

Hearings were to be conducted by the Food and Drug Administration in May to determine whether the so-called cancer drug laetrile (also known as Vitamin B-17 and Amygdalyn) must comply with the pre-marketing requirements for "new drugs" under the Food, Drug and Cosmetic Act.

In a statement submitted to the FDA, the AMA said that "We believe that it is clear that laetrile is not generally recognized by experts qualified to evaluate the safety and effectiveness of drugs as safe and effective. The AMA wholeheartedly supports the efforts of the Food and Drug Administration to require drugs distributed in interstate commerce to comply with the requirements of the law.

"Those who advocate the use of laetrile as a treatment for malignancies in effect exploit the victims of cancer and their families by offering unfounded representations that the patient's cancer will be cured.

"Patients who are persuaded of the effectiveness of laetrile often postpone seeking proven medical treatment which may eradicate or ameliorate the disease."

Recently the state of Alaska legalized the use of laetrile and other states are considering such action.

Transvaginal Repair Of Rectal Stricture Utilizing The Martius Bulbocavernosus Pedicle Graft

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The Martius bulbocavernosus pedicle graft procedure was used in two cases presenting with obstructing rectal stricture. Both patients had associated small rectovaginal fistulas. Increasing difficulty in defecation had necessitated colostomy.

THE use of a bulbocavernosus pedicled graft in the management of vaginal fistula and urinary stress incontinence was first described by Martius[1] of Gottingen in 1942. Shaw[2] popularized its use in the United Kingdom. Through the English language edition of Martius'[3] *Operative Gynecology* by McCall and Bolten, the procedure became better known to North American gynecologists. Boronow[4] has reported excellent results with its use in the management of radiation-induced vesico- and rectovaginal fistulas. The advantages that may result from the Martius graft interposition are as follows:

(1) Neovascularization of an area of diminished blood supply.
(2) Interposition of a living barrier across the site of the excised fistula tract.
(3) Obliteration of dead space.
(4) Added support and padding at the suture line.

Since the technique is simple and the theoretical advantages considerable, the Martius procedure was used in two cases presenting with obstructing rectal stricture. Both patients had associated small rectovaginal fistulas. Increasing difficulty in defecation had necessitated colostomy.

Technique

Prophylactic antimicrobial therapy consisted of kanamycin 1 Gm. I. M. and clindamycin 600 mg. I. M. given four hours before operation. Clindamycin 600 mg. I. M. was repeated at the completion of surgery and 12 hours postoperatively. Thereafter, kanamycin 0.5 Gm. I. M. every 12 hours and oral ampicillin 500 mg. every six hours was continued for six days.

Skin hooks and silk traction-sutures were used to manipulate the tissues. A longitudinal incision of the posterior vaginal wall encompassed the fistula. The vaginal mucosa was then mobilized to expose the anterior rectal wall. The left index finger was placed in the rectum and forced through the stricture. Guided by this finger, the lateral walls of the rectum were mobilized from the surrounding dense scar tissue. The fibrous tissue was then removed from the lateral rectal wall. Bleeding was minimal. An area of the anterior rectal wall including the fistula and the anterior third of the rectal stricture was excised in a modified diamond-shaped manner (Figure 1A).

Utilizing the principle of Heineke-Mikulicz, the rectal wall defect was closed in the transverse axis with interrupted 00 chromic catgut sutures (Figure 1B and 1C). These were introduced per vaginum, with the free ends on the

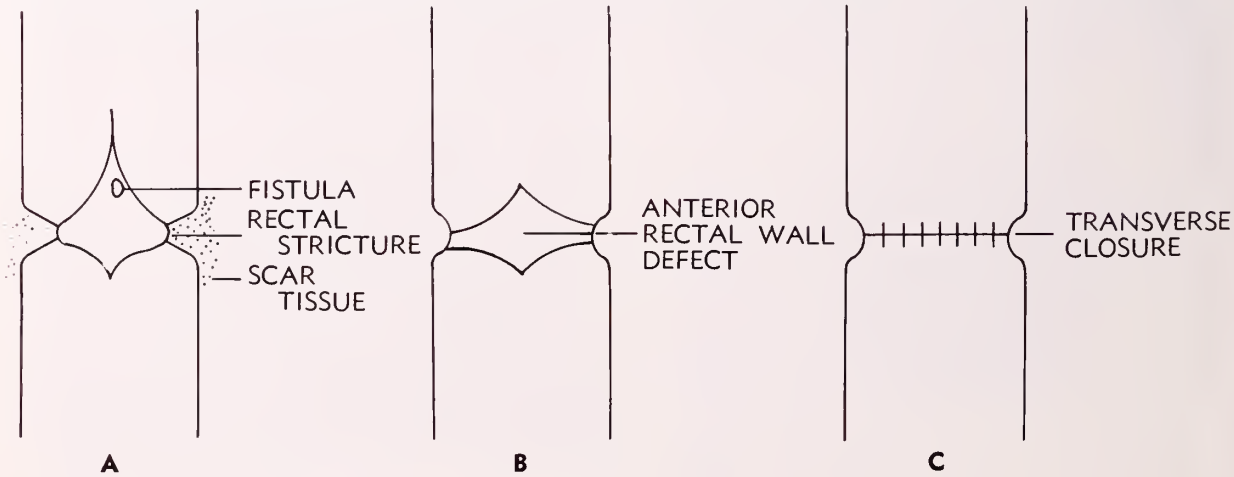

Figure 1.

rectal mucosal aspect. The free ends were drawn out through the anus and serially tagged. The sutures were tied with one finger in the rectum, progressing alternately from the most lateral sutures towards the mid-line. With care to prevent twisting and entanglement, this method of placing the knots on the rectal mucosa side was surprisingly easy. A moderate amount of tension was required to obtain approximation. Rectal examination revealed an adequate lumen.

The perineum and vagina were again prepared with povidone-iodine solution and the patient redraped. Fresh gowns, gloves and instruments were used for the subsequent operative steps. A vertical incision was made over the left labium majus and the entire bulbocavernosus fat-pad was mobilized from above downwards. A wide posterior pedicle was maintained. Numerous bleeding points on the graft were carefully ligated using very superficial fine suture-ligatures. A tunnel was formed along the left vaginal wall commencing adjacent to the graft base and extending to the operative site. This easily admitted two fingers. The pedicled graft was then carried through the tunnel and applied over the suture line and the adjacent anterior rectal wall. Suitable tagging for orientation allowed this to be done without torsion of the graft. The graft was then fixed to adjacent vaginal mucosa by two sutures. The vaginal incision was loosely closed in a cruciate manner. Hemostasis was obtained and the labial incision closed with interrupted ooo Dexon sutures. A small Penrose drain was placed at the lowest point of the labial incision.

Case One

R. B., a 40-year-old gravida 3 para 3, was admitted March, 1974, for treatment of radiation-induced rectal stricture and rectovaginal fistula. Stage III carcinoma of the cervix was diagnosed in August, 1971. The total pelvic radiation dosage was 6400 rads. Satisfactory tumor response was noted. Subsequent examinations revealed progressive induration and narrowing of the upper vagina with associated narrowing of the adjacent rectal lumen. The use of rectal dilators was started. However, rectal narrowing progressed. A rectovaginal fistula 0.5 centimeters in diameter developed immediately proximal to the rectal stricture. Increased difficulty with defecation necessitated performance of a transverse colostomy in December, 1973.

In March, 1974, the patient requested that an attempt be made to repair the rectal stricture, rectovaginal fistula and restore bowel continuity. No evidence of local recurrence or of metastasis was detected. The operation described was performed. The result was satisfactory with closure of the fistula and creation of an adequate bowel lumen. The lower two-thirds of the vagina was of adequate caliber with the upper third moderately constricted. She was not sexually active and instructions in the use of a vaginal dilator were not carried out. The colostomy was closed three months postoperatively. No evidence of upper abdominal metastasis was noted. There was some further narrowing of the upper vagina but no evidence of centrally recurring malignant disease. Bowel function was normal with a narrowed but adequate lumen.

Uremic symptoms developed in November, 1975. Retrograde pyelography revealed pelvi-ureteral obstruction of the patient's solitary kidney. A catheter was passed beyond the obstruction and adequate urine flow obtained. Uremic symptoms cleared with ureteral catheter drainage. Permanent diversion was requested and nephrostomy carried out. Biopsy of tumor mass at the pelvi-ureteral junction revealed squamous-cell carcinoma. Her condition gradually deteriorated with death occurring eight months later.

Case Two

R. M., an 18-year-old nulliparous, white female, was admitted May 24, 1974, for repair of rectal stricture and an associated rectovaginal fistula. Specialist consultation for Hirschsprung's disease was first sought in August, 1970. Sigmoid colostomy and partial resection of aganglionic colon was then performed. Evisceration occurred on the fifth postoperative day. At reoperation, the colon was resected further and a new stoma formed.

In August, 1971, a Swenson pull-through procedure was performed. Fever developed after surgery and persisted for three weeks. Considerable pararectal induration was noted. Increasing difficulty with defecation developed six months postoperatively. A small amount of feces was passed on occasion through the vagina. Examination revealed a rectal stricture 6 cms. above the mucocutaneous junction. Immediately superior to the stricture, a 0.5 centimeter rectovaginal fistula was noted. In April, 1972, eight months following the Swenson procedure, an attempt was made to open the rectal stricture by making incisions at three and seven o'clock positions per anum. A satisfactory lumen was obtained; however, fever and partial large bowel obstruction developed postoperatively. Laparotomy revealed a large pelvic abscess. Since the patient's condition was grave, a termi-

nal sigmoid colostomy was performed. The distal colon was closed and replaced in the abdomen. Rapid improvement then followed.

In June, 1974, now 18-years-old, the patient requested that an attempt be made to establish bowel continuity and correct the rectovaginal fistula. Gynecologic consultation was obtained. Examination revealed a narrow vagina with a 0.5 centimeter fibrous ridge crossing the posterior wall at the level of the mid-vagina. Superior to this ridge and obscured by it, a 0.5 centimeter rectovaginal fistula was demonstrated. Rectal examination revealed a firm stricture subjacent to the ridge on the posterior vaginal wall. An index finger could be forced through this stricture. The pararectal tissues were indurated and fixed. The operation described was performed in June, 1974. Dense scar tissue was encountered throughout the dissection. The rectal defect was approximated with considerable tension. The postoperative course was uneventful. The rectal lumen remained adequate, the vagina normal in appearance and distensibility. Five months following reparative surgery, the colostomy was closed. Bowel function is now normal. The patient reports no difficulty with intercourse.

Comments

Although different in etiology, both cases presented similar management problems. Dense, poorly vascularized scar tissue increased the risk of suture-line failure and infection. Fixation of tissues with loss of normal elasticity rendered the ideal of approximation without tension difficult if not impossible to achieve. If tissues are mobilized too widely, decreased viability is a threat. In such cases, utilization of an interpositional graft may increase the possibility of success. Boronow[4] stresses that the Martius procedure does not substitute for a proper surgical approach in fistula repair and "plugging the fat-pad into the fistula will fail." Kiricuta and Goldstein[5] have obtained satisfactory results in the closure of large post-radiation fistulas by interposition of a pedicled omental graft. No attempt was made to close the bladder defect and the vagina was closed if possible. Shaw[2] utilized the Martius procedure in conjunction with total urethral reconstruction. Later, in performing a sling operation for stress incontinence in the same patient, he noted the fat-pad graft to be healthy. No cases of graft infection or necrosis have been reported.

The above observations indicate that fatty-tissue pedicled grafts do survive and may compensate for suture-line failure. However, until further evidence to the contrary is presented, a meticulous attempt should be made to obtain an ideal closure. Alternative methods of rectal stricture management include the retrococcygeal operation of Lockhart-Mummery[6] and the pull-though procedure of Britnall.[7] The former will not concomitantly manage an associated rectovaginal fistula. The latter would seem to be a formidable procedure in the presence of marked pelvic fibrosis. The use of dilators and transrectal incisions may be of use in mild degrees of stricture. They are seldom effective if severe and extensive scarring is present.

The transvaginal application of the Heineke-Mikulicz principle with utilization of a Martius graft should be considered in the management of the female patient with obstructing rectal stricture.

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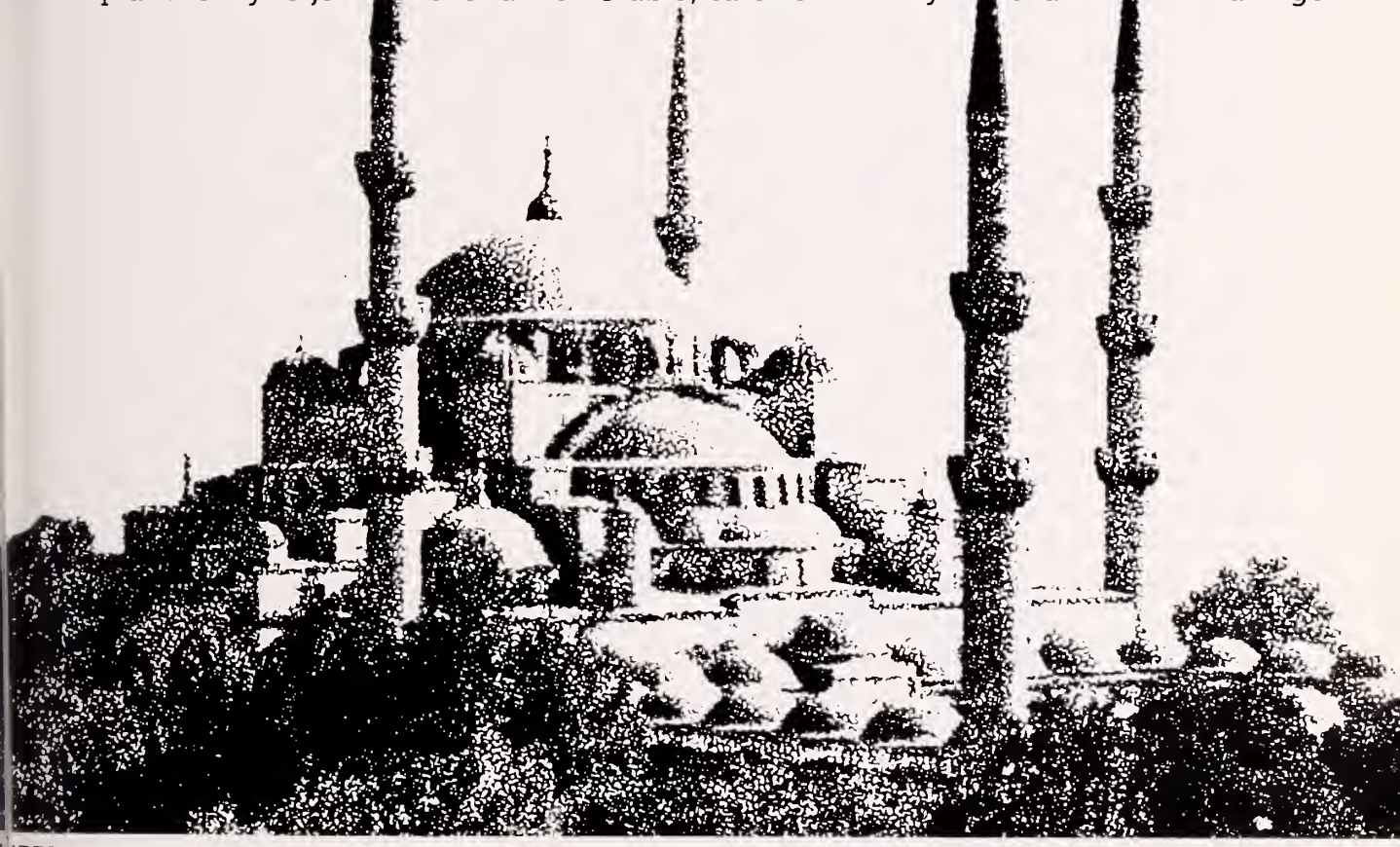

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"WELL DONE!"

At this writing, two of the State Medical Association's most prominent members are ending long years of public service.

Dr. N. H. Dyer, who has headed the State Health Department since September 1, 1946, has decided not to accept appointment as Chairman of a Health Resources Advisory Council created under provisions of a sweeping new health reorganization law enacted by the Legislature's regular 1977 session. He has indicated that he will be leaving public service in the next few months.

Dr. Mildred Mitchell-Bateman has directed the Department of Mental Health—which is combined with the Department of Health and a number of other institutions, boards and hospitals under the new law—since July 24, 1962. She, too, is moving on to new duties, in the field of education.

There is no way, in the few words available here, to express the true gratitude of this Association, the State of West Virginia and its people for the dedication and professional guidance Doctors Dyer and Mitchell-Bateman have provided. Public service is a tough assignment under any circumstances. Direction of programs in the over-all field of health encompasses additional challenges and responsibilities almost beyond powers of comprehension.

To our colleagues, therefore, we express a most sincere "well done." Your work on behalf of the citizens of West Virginia has been invaluable, and we know they appreciate in their hearts what you have done for them.

John J. Mahood

JOHN J. MAHOOD, M. D., *President*

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EDITORIALS

Anywhere you look in Washington these days, some new piece of proposed legislation, or some new concoction of administrative rules and regulations, seems to raise its ugly head with frightening and downright illogical possibilities.

THE FTC MONSTER

Now on the scene is a monster called HR 3816, the Federal Trade Commission Amendments of 1977, under study in the House of Representatives. At this writing, the bill had escaped the Subcommittee on Consumer Protection and Finance and was before the parent House Committee on Interstate and Foreign Commerce. The Senate has similar legislation, S. 1228.

To summarize briefly a highly complex subject, the bill would expand the jurisdiction of the Federal Trade Commission to ANY "person, partnership, or corporation or other organization of legal entity."

Keep in mind that the Federal Trade Commission Act originally was passed in 1914 to protect the public against deceptive acts or practices in commerce by for-profit business entities.

Now we have an apparent, outright perversion of the Act's original purpose; an extension of FTC jurisdiction far beyond what reasonable people consider its capacity to operate effectively; and a serious threat to any "entity"—physicians' organizations included.

Here are five provisions of the bill which certainly bring major objections—and five key reasons why strong opposition to the bill from many directions, including organized medicine, has developed:

Section 14(a) (1) would bring all persons and entities, regardless of whether they are "profit" or "non-profit," under the controls of the FTC Act. This would include all religious, charitable, educational and scientific organizations. Stated simply, this section would give the FTC power to harass ANY organization with unreasonable demands for information. (In later developments, House and Senate committees both deleted Section 14.)

Section 2 would subject any person, partner or corporation to a fine of up to $5,000 a day for failure to provide information ordered by the Commission. It would also limit the manner in which someone could challenge these orders.

Section 5 would restrict court review of the FTC "cease and desist" orders to only those courts of appeal which function in the circuit where the respondent has his principal place of business.

Section 7 would authorize the FTC—if it believed that a law enforced by the FTC had either been violated or was ABOUT to be violated—to go into court and request that a trustee or a receiver be appointed to control the respondent's money or property. This control would remain in effect until the issue was resolved, either by the FTC or by the courts. Section 7 would give the FTC a blank check to seize control of any entity's assets pending the filing and disposition of an FTC complaint. Furthermore, the seizure could even occur PRIOR to an actual violation and PRIOR to the filing of the complaint.

Section 8 would allow any person injured—or who thought he was injured—by any violation of an FTC rule concerning an unfair or deceptive act or practice to sue the alleged violator in a federal or state court, either for himself or as a class action. Expensive and interminable adjudicatory hearings; rule proceedings indefinitely delayed; a proliferation of class actions, and frivolous lawsuits all are seen as a result of final inclusion of this section in any legislation finally enacted.

What will be the final fate of the bill is important, but it isn't the whole ball of wax. The

fact that this kind of legislation, along with others in the area of cost containment with no apparent concern for availability and quality of health care—and in a variety of other areas—is even considered presents a frightening picture.

"Write your congressman" has become almost a cliche. But with this sort of thinking afoot, it no longer is a cliche.

It's a necessity if we can even hope for survival of our society and its basic freedoms.

HEALTH DEPARTMENT REORGANIZATION

The West Virginia Legislature gave Governor Rockefeller his Health Reorganization Act. Neither House nor Senate committees held public hearings on the bill which was introduced very late in the session. It is unlikely that many of the legislators even read through the 146 pages, as the legislation finally emerged.

The State Medical Association read it, didn't like it and said so to the governor and the few legislators who would listen. It was shouting in the wind. In unstatesmanlike, if not embarrassing, haste the measure was passed along with a torrent of other dimly perceived bits of legislation with characteristic efficiency a few seconds before the midnight April 9 deadline.

Now, we are not setting ourselves up as omniscient arbiters of what is good or evil in legislation or government administration. But we can have serious reservations about the manner in which legislation of such sweeping proportions was handled. And we find it difficult to understand an otherwise well motivated governor who encourages such a mindless disregard of legislative responsibility.

Others have criticized and made political capital out of the fact that Governor Rockefeller is an interloper, an alien, here temporarily as he uses West Virginia and the governor's office as a stepping-stone to national political prominence, perhaps the presidency. We happen to think that this is excellent motivation for any occupant of the governor's office and that this assures attempts at excellence. We would be anxious about anyone using that office as a retirement post.

We must confess that we are developing serious misgivings about Governor Rockefeller's political style. He has already come under criticism for stripping thousands of state employees of their civil service protection. Other hints of his administration's commitment to old-time political patronage methods of control have also erupted.

We are concerned, however, that under the new health department reorganization, a health czar has been created with unprecedented power to influence beyond acceptable limits how thousands of employees go about professional duties which should be entirely outside the political realm. We would have liked the opportunity to have discussed this concern. We were denied that opportunity.

We have the perhaps archaic notion that any reorganization of governmental bureaucracy should have as its primary focus the elimination of red tape and redundant programs and jobs leading to identical ends. Our reading of the health department reorganization act reveals the elimination of few, if any, programs or jobs. Everywhere we looked new jobs and advisory positions were created and one grand, brand new layer of bureaucracy has been placed over all. We would like to understand that and how it might help anything beyond the nailing down of a certain number of West Virginia votes. It seems ill-suited to one committed to making a name for himself in the efficient management of health service provision on a statewide scale.

We are not opposed to innovation and progress. We are reluctant to leap up and charge every time someone raises his sword and cries, "Forward." We first like to determine in which direction forward might be.

In the present case we fear forward might actually be backward. The last reorganization of the health department was in 1949. The West Virginia State Medical Association sponsored legislation then which took the Director of Health out of politics and made him an appointee of a nine-member State Board of Health. The governor will now appoint the Director of Health. We will now worry that the Director of Health is back in politics.

Perhaps we omit a proper air of humility by saying that our concern for the health of the residents of West Virginia is different, a little more pure, less sullied than the Governor's. But it's true, nevertheless. We don't have to worry about votes and county party chairmen and running for the presidency and things of that sort. We can focus our attention on the real issues in health without those other distractions.

We will conform to the new law and attempt to make it work in spite of our fears. We, however, will not hesitate to criticize when politics takes precedence over health. The governor might have personal power and influence enjoyed by few before him, but we cannot remain silent when the matter at issue is health care.

If we in organized medicine say "no" to any form of National Health Insurance, we're going to be outshouted, outdone—and perhaps undone—by the labor-liberal crowd that has a strong "yes."

Certainly the Carter Administration will have a "yes," once three preconditions are met. These preconditions are reorganization of the Department of Health, Education, and Welfare (already initiated), welfare reform (for which a task force has been named), and cost controls (as embodied in the proposed ceiling, or "cap," on hospital-cost increases).

AMA's HEALTH INSURANCE MEASURE REASONABLE ALTERNATIVE

Proof of the Administration's commitment to NHI is furnished by HEW's appointment of an Advisory Committee on National Health Insurance Issues. The 29 public members include Edgar T. Beddingfield, M.D., Chairman of the AMA Council on Legislation, but also two outspoken labor leaders—President Leonard Woodcock of the United Auto Workers and Bert Seidman of the AFL-CIO—plus other liberals.

In announcing the appointments, HEW Secretary Joseph A. Califano, Jr. said NHI "is a cornerstone in the structure of the President's domestic policy."

So we can be on the lookout for the Administration to offer an NHI proposal next year—and strive to get it enacted before the 1980 elections.

This proposal, if not basically a facsimile of the Kennedy-Corman-labor NHI bill, is likely to defer to its principal elements—the way the 1976 Democratic platform did.

What is the best way—really the only way—to head off this danger?

Well, no less conservative a U.S. Senator than John G. Tower of Texas has stated, "The most viable means of avoiding the Kennedy-Corman version of socialized medicine is to oppose it with more reasonable alternatives."

And as Congressman Paul G. Rogers of Florida—an influential figure in health-care legislation—has said, "It is my view that to simply oppose legislation without offering alternatives rarely is an effective approach on Capitol Hill."

The American Medical Association's comprehensive health insurance measure is the reasonable alternative.

The AMA recognizes that most of the general public (the ultimate arbiter on the issue) wants an NHI bill. The majority, according to a recent Gallup Poll, want a form of it that is largely free of federal involvement and funding. A plurality—39 per cent of the people polled—wants a version that tallies pretty much with the AMA bill.

The AMA measure would preserve the private thrust of care and its financing. It would depend principally on employer-employee contributions and apply federal funds only to the poor and jobless. These funds, mind you, would come from general revenue—not from any special levy, like the already runaway Social Security tax.

In short, here's a bill that would preserve our professional freedom while honoring the public's wants and needs. We can't let the labor-liberal forces have the NHI ball to themselves. We have to be on the field fighting for it—and fighting as a great, strategic team.—*Guest Editorial By the American Medical Association.*

Our Readers Speak

'Skeptical' Of Ulcer Treatment

I am writing in reference to the recent letter regarding the treatment of the early duodenal ulcer with fluids, soup, and rice porridge, having the patient lie on the right side while sleeping, and giving the patient no medication.[1]

I am skeptical of the efficacy of such a regimen for several reasons.

1. As best I can tell, these studies were not subjected to rigid double-blind controls. For example, the use of the regimen versus accepted forms of treatment of peptic ulcer.

2. The healing rate of duodenal ulcers can vary greatly. A large population of patients with peptic ulcers would need to be studied with results subjected to a statistical analysis.

3. The regimen would have to be of proven value when treating the chronic peptic ulcer patient to be of any realistic value.

4. Many excellent studies[2] have been done across the world showing a limited role for diet restriction in the treatment of peptic ulcer.

The accepted recommendation of Doctor Wastell,[3] a noted peptic ulcer authority of Great Britain, is to eat a regular diet and avoid alcohol, salicylates and tobacco. As Doctor Ingelfinger, the past Editor of the New England Journal of Medicine and renowned gastroenterologist of Boston, states,[4] "Let's face it, no one has yet found a good medical therapy for the patient's tendency to get an ulcer. In the meantime let us not punish the patient and delude ourselves by giving him pap to eat."

1. Lee CH: Simple medical treatment. *W Va Med J* 73:89, April, 1977.

2. Wastell C: Chronic duodenal ulcer. Appleton-Century Crofts, NY, P-124, 1972.

3. Ibid, P-129.

4. Ingelfinger FJ: Let the patient enjoy his food. In: Controversy in internal medicine. Eds Ingelfinger FJ, Relman AS, Finland M, 171. Philadelphia: W. B. Saunders, 1966.

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GENERAL NEWS

Governor To Address First General Session At Annual Meeting

Governor John D. Rockefeller IV will be an honor guest during the State Medical Association's 110th Annual Meeting to be held at The Greenbrier in White Sulphur Springs August 24-27, it was announced by Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee.

Doctor Bell said that Governor Rockefeller has accepted an invitation to speak at the first general session Thursday morning, August 25.

The Governor will be delivering "The Thomas L. Harris Address," which was established with a bequest in the will of the late Dr. Thomas L. Harris.

Doctor Harris, Parkersburg surgeon who served as President of the Association in 1945, established the trust fund in an effort to enhance the quality of the programs for future annual meetings of the Association.

John D. Rockefeller IV

Twenty-Ninth Governor

Elected twenty-ninth Governor of West Virginia in 1976, Governor Rockefeller is the third in his family to be a Governor. Two of his uncles—Nelson A. Rockefeller of New York and Winthrop P. Rockefeller of Arkansas—also served as Governors of their respective states. Nelson A. Rockefeller most recently held the office of Vice President of the United States.

The Governor was graduated from Phillips Exeter Academy and Harvard University. From 1957 through 1960, he attended International Christian University in Tokyo, Japan, where he taught English and developed fluency in the Japanese language. He returned to Harvard in 1961 and was graduated with a bachelor of arts degree in Japanese and Far Eastern Affairs and Languages. He also studied the Chinese language at Yale University.

Also in 1961, the Governor was appointed by President John F. Kennedy to serve on the National Advisory Council of the Peace Corps. In 1962, he became Special Assistant to Peace Corps Director R. Sargent Shriver. Later, he served in the State Department in the Bureau of Eastern Affairs as Desk Officer for Indonesian Affairs and as Special Assistant to the Assistant to the Secretary of State for Far Eastern Affairs.

Came To State In 1964

In July, 1964, Attorney General Robert F. Kennedy chose Governor Rockefeller to work with the President's Commission on Juvenile Delinquency and Youth Crime. That program, and his own interest in disadvantaged Appalachian youth, brought him to West Virginia in 1964, where he later worked directly with Action for Appalachian Youth, a West Virginia anti-poverty program.

As his interest in anti-poverty work grew, he decided he could be most effective by entering elective politics himself.

In 1966, he led the ticket in being elected a member of the West Virginia House of Dele-

gates from Kanawha County. During his two-year term, he served on the committees on Finance, Education, and Agriculture and Natural Resources.

On April 1, 1967, Governor Rockefeller married Sharon Percy, daughter of U. S. Senator Charles H. Percy of Illinois. A public figure in her own right, West Virginia's new First Lady graduated cum laude from Stanford University in 1966, and worked following graduation with Operation Crossroads Africa, helping to build a youth center in the Central African Republic. She has served as Chairman of the Board of Mountain Artisans, a West Virginia-based self-help quilting business. She also serves on the Board of Trustees of Stanford University, and headed West Virginia's "51.3%" program, an effort designed by President Jimmy Carter to emphasize the need for women in key government positions.

Elected Secretary Of State

In 1968, Governor Rockefeller won his first statewide office and was elected to a four-year term as Secretary of State, an office in which he spearheaded an aggressive election law reform program and succeeded in establishing an Elections Division in that office. During this period, he also became a spokesman on many environmental issues unique to West Virginia and began an active involvement in efforts to promote greater economic development in West Virginia. He served as a board member of the Committee of 100, a group organized to expand business and industry in the Kanawha Valley.

In 1969, Governor Rockefeller became the first West Virginian ever to be chosen by the United States Jaycees as one of the country's "Ten Outstanding Young Men in America."

In 1972, he received 73 per cent of the primary vote to win the Democratic Party's nomination for Governor, but lost in the general election in the year of a Republican landslide.

President At Wesleyan

Governor Rockefeller, out of government for the first time since the early 1960s, turned his energy and attention to another area of great personal interest—higher education. He was chosen by the Board of Trustees to be the twelfth President of West Virginia Wesleyan College in Buckhannon. At Wesleyan, a Methodist-related institution, he implemented a new recruiting program that saw enrollment increase from around 1,500 to 1,800—the highest in the history of the institution. He also established a Master of Arts in Teaching degree program, established an Appalachian Training program and introduced a new business management system into all fiscal and operational aspects of the college. A new physical education and sports center was named after Rockefeller shortly after he left Wesleyan.

In 1974, Governor Rockefeller was one of the 12 college and university presidents chosen to represent the United States in a month-long visit to the People's Republic of China.

In 1975, he was included in Time Magazine's list of "a new generation of leaders" for the country's Bicentennial era.

Governor and Mrs. Rockefeller are the parents of three children—Jamie, Valerie and Charles. They are members of the First Presbyterian Church of Charleston.

Other Appointments

Governor Rockefeller serves as a trustee of both the University of Notre Dame and the University of Chicago, and served as a board member of the Rockefeller Foundation until shortly after his election as Governor. He also is a member of the Visiting Committee on East Asian Studies at Harvard University.

He holds honorary degrees from the University of Cincinnati and the University of Alabama, Davis and Elkins College, Salem College, West Virginia Institute of Technology, West Virginia University and Dickinson College.

Governor Rockefeller resigned as President of West Virginia Wesleyan College to run for governor. His election followed a primary and general campaign in which he articulated his party's and his own positions on tax reform, economic development, government management, education and road improvements.

His margin of victory in the November 2, 1976, general election was 238,195 votes—the largest of any gubernatorial candidate in the 113-year history of West Virginia.

Business, Other Meetings

The Pre-Convention meeting of the Association's Council will be held on Wednesday morning, August 24, with the first session of the House of Delegates following that afternoon.

It was announced previously that Dr. John H. Budd of Cleveland, who will be installed later this month as President of the American Medical Association during its Annual Meeting in San Francisco, will be the principal speaker at the first House session.

Sections and societies affiliated with the Association are scheduling breakfast and other scientific and business meetings on Friday and Saturday.

Dr. John J. Mahood of Bluefield, President, will deliver his Presidential address at the second and final session of the House of Delegates on Saturday afternoon, August 27.

Reservations Urged

Physicians planning to attend the meeting are urged to make reservations immediately at The Greenbrier since they are required 45 days in advance. It is anticipated that more than 600 physicians, their wives and guests will be in attendance.

Additional information concerning the 110th Annual Meeting, including additional scientific speakers, will be published in the July and August issues of *The Journal.*

Dr. Marshall J. Carper Installed As State AAFP President

Dr. Marshall J. Carper of South Charleston was installed as President of the West Virginia Chapter, American Academy of Family Physicians, during the chapter's 25th annual scientific assembly held in April in Morgantown at the Lakeview Inn and Country Club.

A record 225 persons attended the meeting, during which Dr. Asel P. Hatfield of Harrisville was elected President Elect.

The program included some 18 scientific presentations and addresses by present and past officers.

Doctor Carper is Associate Director of the Kanawha Valley Family Practice Center in South Charleston. He succeeds Dr. Ray M. Kessel of Logan.

The Academy presented its "Mr. Doc" award to Dr. Edward M. Jackson of St. Albans in recognition of his many contributions to the practice of medicine.

Dr. Carl B. Hall of Charleston, a Past President of the American Academy of Family Physicians, told the group that family physicians are the "bright hope" for ending the physician shortage in West Virginia.

"In spite of the many obstacles faced in recent years by those seeking to develop an effective system of family care, we are succeeding," he declared.

Other officers elected included Drs. Thomas P. Long, Man, Vice President; John L. Fullmer, Morgantown, Secretary; and Thomas L. Ritz, Wheeling, Treasurer.

Drs. Joseph A. Smith of Dunbar and Del Roy R. Davis of Kingwood were re-elected as AAFP delegates.

Named to fill vacancies on the board of directors were Drs. William H. Harriman, Jr., of Terra Alta and Thomas O. Dickey of Wheeling. Re-elected to the board were Drs. Dewey F. Bensenhaver of Petersburg and George W. Hogshead of Nitro.

The scientific program was divided into the areas of "Office Orthopedics," "Problems of the Alcoholic," "Neurology," "Dermatology" and "Adolescent Problems."

In the discussion on alcoholism, Dr. Manuel M. Pearson, Philadelphia psychiatrist, stated that "our profession is not immune to this chronic, progressive and potentially fatal disease." He pointed to statistics showing that 17,000 doctors —five percent of the total number in medical practice—were known alcoholics.

The 1978 meeting will be in Charleston next April 8-10.

Dr. Marshall J. Carper of South Charleston (left), who was elected President of the West Virginia Chapter, American Academy of Family Physicians during the chapter's annual meeting in April, and Dr. Edward M. Jackson of St. Albans examine the "Mr. Doc" award which was presented to Doctor Jackson in recognition of his many contributions to the practice of medicine.

More Than Half Of WVU Medicine Graduates To Train In State

More than half the members of West Virginia University School of Medicine's Class of 1977 (47 of 83) will be spending their first postgraduate year in West Virginia—the greatest number, so far, in the four-year school's history.

Of the 72 men and 11 women who received degrees in medicine May 15 at WVU, 73 participated in the National Intern and Resident Matching Program's computerized system that pairs senior medical students and hospitals according to the choices of both. Most of those who did not take part in the program have military or other scholarship obligations that determine their destinations after graduation.

Among those who will be staying in the state, 24 will be at University Hospital, 11 at Charleston Area Medical Center, five at Wheeling Hospital, four at Kanawha Valley Family Practice Program, two at Beckley Appalachian Regional Hospital, and one at United Hospital Center, Clarksburg.

The postgraduate programs chosen and the number in each are: medicine (25), family practice (19, includes 15 in West Virginia), psychiatry (10), surgery (8), general flexible and radiology (5 each), pediatrics (3), research and anesthesiology (2 each), and obstetrics/gynecology, orthopedic surgery, neurology and pathology (1 each).

More Doctors For State

"Our results at WVU further the prospect of more doctors for West Virginia, since physicians tend to enter practice in or near areas where they complete their specialty training," said Dean John E. Jones, M. D., of the School of Medicine. They also reflect this year's matching program, participated in by 11,172 prospective graduates of U.S. medical schools, which confirms a four-year trend toward primary care specialties (family practice, medicine and pediatrics).

Members of the Class of 1977, their home towns, and where most will be after July 1 are:

Kevan P. Andrews, Berkeley Springs, Mayo Graduate School of Medicine, Rochester, Minn.; Robert B. Atkins, Danville, Kanawha Valley Family Practice Program; David M. Baughan, Huntington, Group Health Cooperative, Seattle, Wash.; James M. Beane, Fayetteville, WVU Department of Radiology; Paul A. Blair, Kenova, Charleston Area Medical Center (CAMC); Thomas E. Blume, Fayetteville, and D. Gregory Bott, Rio, WVU Department of Family Practice; Rhonda K. Brennan, Sarah Ann, Vanderbilt University, Nashville, Tenn.; James Brick, Dunbar, WVU Department of Medicine; John F. Brick, Dunbar, WVU Department of Neurology; Marjorie Bush, WVU Department of Surgery.

Larry K. Cantley, Big Chimney, CAMC; Wayne B. Cayton, Vienna, Beckley Appalachian Regional Hospital-Marshall University Affiliate; Louis S. Chaldares, Weirton, WVU Department of Anesthesiology; Terence M. Cone, Clarksburg, WVU Department of Medicine; Carolyn A. Crutchley, Bridgeport, St. Mary's Hospital, Grand Rapids, Mich.; David A. Denning, Ravenswood, Ohio State University, Columbus; Steven Diehl, Morgantown, Wilford-Hall USAF Medical Center, San Antonio, Tex.; George H. Dornblazer, Elkins, WVU Department of Behavioral Medicine and Psychiatry; Terry L. Elliott, Smithville, and Edward L. Emch, Morgantown, Wheeling Hospital; Winston Evans, Montgomery, Beckley Appalachian Regional Hospital.

Pamela M. Fawley, Morgantown, WVU Department of Behavioral Medicine and Psychiatry; Michael A. Fiery, Princeton, Roanoke (Va.) Memorial Hospital; Jerry W. Froelich, Cabin Creek, Massachusetts General Hospital, Boston; Paul E. Frye, Fairmont, Ohio State University; Richard D. Gais, Morgantown, WVU Department of Family Practice; John E. Golay, Hampton, Va., Charlotte (N.C.) Memorial Hospital; Robert E. Gunnoe, Charleston, CAMC; James D. Helsley, Berkeley Springs, First Colonial Family Practice Center, Virginia Beach, Va.; Timothy B. Hetzer, Nottingham, Pa., WVU Department of Radiology; Thomas B. Hokanson, Wheeling, Harrisburg (Pa.) Polyclinic Hospital.

Katherine Huffman, Princeton, University of North Carolina, Chapel Hill; Sidney Jackson, Morgantown, United Hospital Center, Clarksburg; David H. Johe, South Charleston, Hartford (Conn.) Hospital; Robert M. Jones, South Charleston, WVU Department of Family Practice; Denise T. Kalinowski, McKeesport, Pa., WVU Department of Radiology; Fred T. Kerns, Parkersburg, and John F. Kessler, South Charleston, CAMC; Eugene R. Kidwell, Princeton, and John H. King, New Martinsville, WVU Department of Behavioral Medicine and Psychiatry; John R. King, Cora, Wheeling Hospital; Norman Kowal, Morgantown, research-location not listed; David J. Larkin, Princeton, WVU Department of Anesthesiology.

George J. Linsenmeyer, Huntington, St. Louis (Mo.) University Group Hospitals; Michael A. Luchini, Beckley, University of Kentucky Medical Center, Lexington; John Mani, Canton, Ohio, Fitzsimmons Army Medical Center, Denver, Colo.; Thomas F. Mann, Lewisburg, CAMC; Michael B. McBride, Charleston, Kanawha Valley Family Practice Program; Chris W. McGary, Charleston, Waterbury (Conn.) Hospital; James E. McJunkin, Charleston, and Mary L. McJunkin, Beckley, Thomas Jefferson University, Philadelphia, Pa.; Keith C. McLaughlin, Fairmont, WVU Department of Obstetrics/Gynecology; Paul S. Meade, Huntington, Methodist Hospital, Dallas, Tex.; William Mentz, Welch, Medical Center Hospitals, Charleston, S. C.

Amabile Milano, Sophia, and Lawrence M. Minardi, Charleston, CAMC; Robert Nuzum, Huntington, University of North Carolina; Richard A. Orr, Morgantown, WVU Department of Pediatrics; Elizabeth S. Parkin, Charleston, WVU Department of Surgery; Darrel K. Quick, Elkview, Mount Carmel Hospital, Columbus, Ohio; Scott K. Radow, Charleston, Medical College of Virginia, Richmond; Norval L. Rasmussen, Morgantown, WVU Department of Pediatrics; Timothy G. Saxe, Morgantown, CAMC; Stephen L. Sebert, Fairlea, Kanawha Valley Family Practice Program; George W. Shehl, Clarksburg, Allegheny General Hospital, Pittsburgh, Pa.; Davis H. Singleton, Garrardstown, University of Kentucky Medical Center; Richard Sizemore, Clay, U. S. Navy, Oakland, Calif.; Forrest W. Smith, Fairmont, Wheeling Hospital; Jack Smith, Dunbar, research-location not listed; Stephen M. Smith, Pennsboro, CAMC.

John J. Templeton, Glenville, Wheeling Hospital; Donald F. Teter, Franklin, Kanawha Valley Family Practice Program; Jack R. Traylor, Huntington, Akron (Ohio) City Hospital; Ronald O. Valdiserri, Monongahela, Pa., University of Pittsburgh Hospitals; John R. Vanin, Morgantown, WVU Department of Behavioral Medicine and Psychiatry; John S. Veach, Petersburg, WVU Department of Medicine; Virginia S. Villani, Welch, University of Kentucky Medical Center; Matthew B. Vukoson, Morgantown, WVU Department of Family Practice; Richard A. Wallace, St. Albans, Roanoke (Va.) Memorial Hospital; Roger K. Westfall, Flatwoods, Bowman-Gray University, Winston-Salem, N.C.; Howard Wold, Northwood, N.D., Letterman Army Medical Center, San Francisco, Calif., and David O. Wright, Charleston, CAMC.

AMA Convention June 18-23 In San Francisco

A number of West Virginia physicians will attend the 126th annual convention of the American Medical Association to be held June 18-23 in San Francisco.

Richard E. Flood, M. D.

Frank J. Holroyd, M. D.

The convention will include special lectures, postgraduate courses, scientific exhibits, medical motion pictures and other activities designed to further the continuing education of physicians.

In addition to the scientific programs at the San Francisco Civic Center and the San Francisco Hilton, the AMA's policy-making body, the House of Delegates, will convene in the Fairmont Hotel for its semi-annual session.

The House includes 250 delegates, representing each of the state medical societies and the scientific specialties, the military services and the federal government. Interns, residents and medical students now have official representation in the policy body.

The West Virginia State Medical Association's two Delegates to the AMA House of Delegates are Drs. Richard E. Flood of Weirton and Frank J. Holroyd of Princeton, with Drs. George R. Callender, Jr., of Charleston, and Harry S. Weeks, Jr., of Wheeling, as Alternate Delegates.

Dr. Stephen D. Ward of Wheeling is a member of the AMA's Council on Legislation.

Seventy postgraduate courses covering the complete range of medical practice will be offered.

General lecture sessions will include such topics as diuretics, digitalis and other drugs in heart disorders, the Swine Flu program, impact of malpractice suits on medical practice, the federal thrust in primary medical care, and treatment of the adolescent.

Some 200 scientific exhibits will be offered.

The complete program for the convention was published in the April 18 issue of the Journal of the AMA.

23 New Family Practice Residents To Begin Training July 1

State medical educators have noted that the program to train young doctors as family practice specialists has accelerated faster than first expected.

Now in its fourth year, the three-year residency effort on July 1 will have 51 participants in the learning-working process at Clarksburg, Huntington, Morgantown, South Charleston and Wheeling.

While 13 doctors have completed their residency (see May issue of *The Journal*), another 23 will begin their work on July 1. The training is being coordinated through the Family Practice Department at West Virginia University School of Medicine.

Of the new group of residents, 13 are West Virginia natives. The states of California, Illinois, Ohio, Oregon, Pennsylvania; and Scotland in the United Kingdom, also are represented.

State 'Attracting More Doctors'

"Instead of losing more young people," Dr. Ray M. Kessel of Logan commented, "West Virginia appears to be attracting—and keeping—more doctors. This is a good sign that the Mountain State is doing something all right."

Doctor Kessel is directing the program at the Marshall University Family Care Center in Huntington. He also is immediate Past President of the West Virginia Chapter, American Academy of Family Physicians that has sparked the educational drive.

Residents being accepted for training at Huntington on July 1 are Frank Glavan of Cleveland and Kenneth Chaster of Gallipolis, Ohio; George Eden, Scranton, Pennsylvania, and Malcolm Smith, Abden, Scotland.

New residents at other centers will be:

Clarksburg—Sidney Jackson of Shinnston and Charles Chang, Los Angeles, California.

Kanawha Valley, South Charleston—Mike McBride and Terry Perrine, Charleston; Robert Atkins of Danville, Donald Teter of Franklin and Stephen Sebert of Lewisburg.

Morgantown—Thomas A. Blume of Fayetteville, Robert M. Jones of Charleston, Richard Gais of Morgantown, Thomas Pack, Flossmoor, Illinois; Matthew B. Vukson, McKeesport, Pennsylvania, and James Goodwin, Philadelphia.

Wheeling—Ward Lee Emch of Milton, Forrest Wayne Smith of Fairmont, John Junior Templeton of Morgantown, John R. King of Westover, Terry L. Elliott of Smithfield; and Kelley D. Rutherford, Portland, Oregon.

There are 14 graduates from the West Virginia University School of Medicine among the 23 entering the residency programs.

State Medical Boards Federation Elevates Doctor Flood

Dr. Richard E. Flood of Weirton has been elected President-Elect of the Federation of State Medical Boards of the United States.

Doctor Flood, who had been serving as Vice President, was elevated to the new post during the Federation's 73rd annual meeting held recently in Chicago.

He is a member of the Federation's Examination Committee. The committee's licensing examination is administered in 48 of the 50 states and in two provinces of Canada. He also is a member of the West Virginia Medical Licensing Board.

Doctor Flood, who has practiced in Weirton for 30 years, is a member of the staff of Weirton General Hospital and is Director of the hospital's Family Practice Education Program.

He is a Clinical Professor in the Department of Family Practice at the West Virginia University Medical School. A Past President of the State Medical Association, he currently is a Delegate of the Association to the American Medical Association. He also is Chairman of the State Association's Nurses Liaison Committee.

Other current and past appointments include: Past President, West Virginia Chapter, American Academy of Family Physicians, and currently a member of the Commission on Legislation and Governmental Affairs of the AAFP; member of the National Joint Practice Commission between Medicine and Nursing, member of the AMA's Committee on Nursing and Committee on Medical Options; and Chairman of the Pharmacy and Therapeutic Committee and the Utilization Review Committee at Weirton General Hospital.

Doctor Hoffman Receives Highest Award In Urology Field

Dr. Charles A. Hoffman of Huntington has been named the recipient of the Ramon Guiteras Award by the American Urological Association. This is the highest award the association can bestow, and is given for outstanding contributions in the field of urology.

Charles A. Hoffman, M. D.

The award was presented during the 75th anniversary meeting of the association at Chicago in April. It is named after the founder and first President of the organization, and is not awarded each year unless there is a worthy beneficiary. The recipient is chosen by a committee composed of the preceding three past presidents and approved by the executive committee.

Doctor Hoffman is a Past President of the State Medical Association and the American Medical Association.

He is in practice with Drs. Tara C. Sharma and Harold N. Kagan at the Hoffman Urological Clinic in Huntington.

WVU School Of Medicine Awards Convocation

Students and faculty shared honors in April at West Virginia University School of Medicine's awards convocation.

The annual event recognizes student and faculty achievement through announcement and presentation of specific awards established at the school by various donors.

Individual awards and their recipients are:

Lange Book Awards for scholastic achievement—Bruce Guido, Fairmont, and Richard Allman, Parkersburg, first-year students; Dennis Pullins, Point Pleasant, and Robert Pusateri, Weirton, second-year students.

Mosby Book Awards for scholastic achievement in the second year—Stephen Bower, Dunbar; Peter Edelman, Charleston; Martha Hales and Samuel Mahaffey, Morgantown; Konrad Nau, Wheeling, and Claude K. Shannon, Tunnelton.

Upjohn Award, an engraved plaque and $150, to the senior chosen by fellow members on the basis of applied personal qualities, character and leadership—Matthew Bruce Vukoson, Morgantown.

E. J. Van Liere Award, an engraved medal and $100, in recognition of the presentation at the Student Research Convocation judged by a faculty committee to be most excellent—John White, Glasgow, first-year student; second place and $50—Jerry Froelich, Cabin Creek senior, and third place and $25—Robert Pusateri, Weirton, second-year student.

Edward G. Stuart Memorial Award, consisting of a desk clock, $25, and the recipient's name inscribed on a permanent plaque, to the senior chosen by department chairman as best exemplifying the qualities of empathy and understanding and strengthening competency with compassion—Robert Allen Nuzum, Huntington.

Anido Award, $25 and recipient's name inscribed on permanent plaque, for outstanding academic achievement in laboratory medicine by a second-year student—Linda S. Yazvac, Morgantown.

CIBA Award, an atlas of medical illustrations, for outstanding community service by a member of the second-year class—John R. Beatty, Huntington.

American Medical Women's Association Scholarship Achievement Citations to women honor graduates in 1977—Kevan Andrews, Berkeley Springs, and Katherine Huffman, Princeton.

MacLachlan Award, an engraved plaque provided by the School of Medicine Alumni Association and given to a basic sciences faculty member or department chosen by the second-year students for "demonstrated unusual teaching ability and a sincere interest in the progress of the entire class"—the Department of Pharmacology.

Senior Class Presentation, an engraved wall plaque awarded by vote of the seniors for excellence in clinical teaching—Drs. William H. Carter, Harold Selinger and Stafford G. Warren, members of the Charleston Cardiology Group.

The Class of 1977, through its president, Robert A. Nuzum of Huntington, also announced establishment of a student emergency loan fund to be named in honor of Dr. Edmund B. Flink, Professor and former Chairman of the Department of Medicine.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication. *Meanwhile, please see a review of the books, "Occupational Lung Diseases" and "Lupus (The Body Against Itself)," on page xvi of this issue of The Journal.—Editor.*

Current Obstetric & Gynecologic Diagnosis Treatment, by Ralph C. Benson, M. D., and associate authors. 912 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1976.

Current Medical Diagnosis & Treatment, by Marcus A. Krupp, M. D., and Milton J. Chatton, M. D., and associate authors. 1,066 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1977.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

State Physicians Certified By Specialty Groups

A number of State physicians who have been certified by their specialty organizations recently have been reported to *The Journal*.

Named Fellows of the American College of Physicians in April were Drs. Jerome C. Arnett, Jr., of Elkins, Abnash C. Jain, Morgantown, and James T. Hughes, Ripley.

Dr. Balusamy Subbiah of Clarksburg has been certified in pulmonary disease by the American Board of Internal Medicine.

Among those physicians recently named as Diplomates of the American Board of Family Practice are Drs. J. D. Woodrum and Buford W. McNeer (re-certified), both of Hinton; Dewey F. Bensenhaver, Petersburg, and William P. Sinclair, Wheeling.

New JCAH Director Chosen

John E. Affeldt, M. D., recently was appointed Director of the Joint Commission on Accreditation of Hospitals (JCAH) by the JCAH Board of Commissioners. He succeeds John D. Porterfield III, M. D., Director of the JCAH since 1965, who is retiring in August. Doctor Affeldt has been Medical Director of the Los Angeles County Department of Health Services since 1972. He will report to JCAH as Director-designate on July 1, and will assume his new duties as chief executive officer August 15.

Parkersburg CME Program Given Provisional Accreditation

The continuing medical education program of the Mid-Ohio Valley Continuing Medical Education Committee (Camden-Clark Memorial Hospital, St. Joseph's Hospital Center and the Parkersburg Academy of Medicine) has been granted provisional accreditation by the State Medical Association through its Committee on Medical Education and Hospitals.

The joint CME effort was given a two-year provisional accreditation for a newly developing program, effective May 4, 1977.

The site survey was conducted in Parkersburg March 30-31 by Drs. R. James Yates of Beckley, Chairman, and Robert D. Hess, Clarksburg. Credit for category 1 of the American Medical Association's Physician's Recognition Award is effective retroactively to March 30, 1977.

Meanwhile, re-surveys were scheduled for the West Virginia Academy of Ophthalmology and Otolaryngology on April 25, the West Virginia Chapter, American College of Surgeons, May 5, and Beckley Appalachian Regional Hospital, June 1.

Named To Hearing Aid Board

The State Senate, during the May session of the Legislature, confirmed the appointment by Governor John D. Rockefeller IV of Dr. William C Morgan, Jr., of Charleston to the State Board of Hearing Aid Dealers.

Doctor Morgan will replace Dr. James T. Spencer of Charleston, who resigned, for a term ending July 13, 1979.

Dr. Donald C. Doll Receives Cancer Fellowship

Dr. Donald C. Doll of the Department of Medicine at the West Virginia University Medical Center has been awarded an $18,000 Junior Faculty Fellowship by the American Cancer Society for each of the next three years.

The cancer society makes these awards to particularly outstanding individuals at medical centers around the country who want to pursue a career in cancer teaching and research. This one is the first ever to be awarded to the Department of Medicine at the Medical Center.

For the last two years, Doctor Doll has been a Fellow in Medical Oncology at Morgantown and has been the recipient of support from the cancer society for this training. He has received training at the Medical Center in the management of all forms of cancers and has developed research interests in treating leukemia and myeloma. Doctor Doll is now one of only two trained medical cancer specialists in the State.

AMA Reaffirms Opposition To Legal Marijuana

The American Medical Association has reaffirmed a position that it "does not advocate nor condone the legalization or use of marijuana."

The AMA also reaffirmed a stand that the penalty for simple possession of marijuana for personal use by individuals in private should at most be a misdemeanor.

In testimony before a congressional committee, Herbert A. Raskin, M. D., former Chairman of the AMA Committee on Alcoholism and Drug Dependence, cited a policy opposing marijuana use adopted by the AMA House of Delegates in 1972, and declared: "We have no reason now to alter this view."

Doctor Raskin said: "Although the personal use of marijuana should not be subjected to disproportionate criminal penalties, we believe that sufficient evidence exists indicating possible adverse effects on the user.

"We believe that educational programs should be developed to discourage the public from the use of marijuana."

Doctor Raskin said that it is clear that marijuana is an intoxicant that may have undesirable psychological effects. Reports of several research studies in recent years have raised serious and as yet unresolved questions regarding the possible effects of marijuana upon the body's immune mechanisms, testosterone levels in males, and other biological functions, he said.

Medical Meetings

June 3-4—4th Annual White Water Surgery Conference, Charleston.

June 4—5th Annual Respiratory Care Symposium (W. Va. Society for Respiratory Therapy/ W. Va. Lung Assn.), Parkersburg.

June 5-7—Am. Diabetes Assn., St. Louis.

June 13-15—Conference on Health Records (Assn. for Health Records), Arlington, Va.

June 13-18—School of Alcohol & Drug Abuse Studies, Morgantown.

June 16—Post Graduate Session, Tygart's Valley Medical Society, Elkins.

June 18—Anesthesia Update '77, Morgantown.

June 18-23—AMA, San Francisco.

June 20-22—Am. Neurological Assn., Chicago.

Aug. 11-13—ACS, Big Sky, Mont.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 15-16—Medical Society of the District of Columbia, Washington, D. C.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 27-30—Am. Roentgen Ray Society, Boston.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 23-26—Indiana State Medical Assn., Indianapolis.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Nov. 6-9—Southern Medical Assn., Dallas.

1978

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

April 8-10—W. Va. Chapter, AAFP, Charleston.

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Selective Transcatheter Embolization Of A Renal Neoplasm: Report Of A Case

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A large renal neoplasm was successfully infarcted preoperatively by selective arterial embolization with Gelfoam. In this paper, a report of this case is presented and literature pertinent to it is reviewed.

Selective embolization of particulate materials into an artery for the purpose of occlusion evolved from the success of infusion techniques in the control of massive hemorrhage, usually arising from the upper gastrointestinal tract. In recent years, embolization procedures have been used in a variety of clinical situations, including control of hemorrhage, nonoperative therapy for arteriovenous malformations, and tumor infarction. The following is a recent case in which a large renal neoplasm was selectively embolized and infarcted prior to nephrectomy. To the best of our knowledge, this is the first time this procedure has been performed in Charleston.

Case History

A 42-year-old white male was admitted to Herbert J. Thomas Memorial Hospital with severe left flank and abdominal pain. A large tender mass was palpable in the left flank and enlarged left supraclavicular nodes were present. Urinalysis and CBC were normal. A selective left renal arteriogram demonstrated a large vascular neoplasm without significant arteriovenous shunting (Figure 1). Left supraclavicular node biopsy revealed poorly differentiated metastatic hypernephroma. Chest x-ray revealed a nodule in the left lung and liver scan delineated a single defect presumed to represent metastatic disease.

Due to persistent, severe pain, surgical resection of the primary tumor appeared to be the best approach for palliative management. Embolic infarction was undertaken to provide better

Figure 1. Arteriogram demonstrating hypervascular tumor in middle and upper pole of left kidney.

surgical accessibility of this large vascular neoplasm.

A 0.066 inch polyethylene catheter was placed into the orifice of the left renal artery, utilizing the Seldinger technique. After a preliminary arteriogram, gelatin sponge (Gelfoam), cut into 2 x 15 mm. strips and suspended in contrast media, was injected. As progressive occlusion of the artery was observed, further emboli were injected with great caution to prevent systemic embolization (Figure 2). Within several minutes following occlusion, the patient reported severe flank pain requiring large doses of an analgesic. Systolic blood pressure rose to 190 mm. Hg. from a baseline 120 mm. Hg.

Radical nephrectomy, 18 hours later, was complicated by adherence of the tumor to the splenic flexure of the colon. The ascending branch of the left colic artery was sacrificed. Overall vascularity and tumor bulk was considerably decreased allowing easier mobilization and resection. Subsequent pathologic examination showed ischemic necrosis of the tumor (Figures 3, 4). Metastases were present in multiple lymph nodes, the adrenal gland, and the tumor infiltrated into perinephric fat and Gerota's fascia.

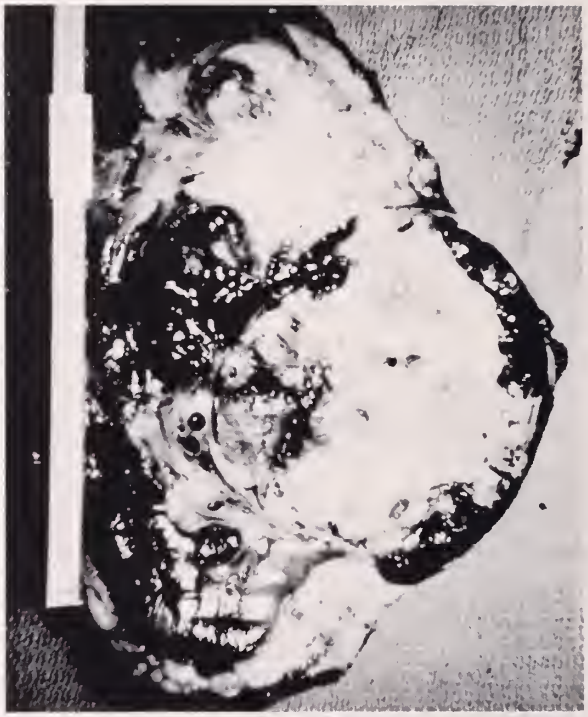

Figure 3. Gross specimen of kidney and tumor.

Postoperatively, blood pressure returned to normal, pain resolved and the patient was referred for chemotherapy.

Figure 2. Following embolization with Gelfoam, note cut-off of contrast column in main renal artery.

Figure 4. Gelfoam strip within arterial thrombus.

Discussion

Particulate embolization in humans was first performed by Luessenhop in 1965 for the control of large cerebral arteriovenous malformations.[9] Robles expanded the technique by using autologous muscle particles.[14] The technique was applied to acute massive upper gastrointestinal bleeding in cases refractory to vasopressin.[15] Selective embolization was effectively utilized for "medical management" of peripheral arteriovenous malformations, especially those acquired as a result of needle biopsy of the kidney.[3,5] Table 1 lists the current clinical situations where embolization techniques have proved effective.

TABLE 1

Indications for Selective Embolization

1. Trauma—severe hemorrhage following pelvic fracture[13]
2. Arteriovenous malformations
   a. Cerebral
   b. Peripheral
   c. Iatrogenic (following needle biopsy)
3. Gastrointestinal bleeding refractory to vasopressin in patients unable to tolerate surgery
4. Bleeding in the cancer patient from unresectable tumor[6,11]
5. "Medical nephrectomy" for malignant hypertension
6. Preoperative tumor infarction

The choice of embolic material includes autologous blood clot (fresh or thrombin-treated), subcutaneous tissue, fat, muscle, gelatin sponge (Gelfoam), and Ivalon (polyalcohol). Tissue adhesives such as Isobutyl 2-Cyanoacrylate are currently under investigation.[4] Lang combined embolization with radiotherapy by selectively injecting Au^{198} or radon seeds into tumor tissue.[8] Occlusion with a balloon catheter has been advocated by some authors.[10,17]

Renal tumor infarction was performed initially in an attempt to facilitate immunologic regression of metastasis.[1] However, this was not considered effective, but did improve surgical accessibility in those cases operated upon and did control troublesome hematuria in selected cases. Current indications for selective renal tumor infarction include: decreasing the bulk and vascularity of large tumors prior to nephrectomy; palliation of local symptoms such as pain, controlling massive hematuria, and decreasing tumor hormone production when present. Several recent publications further describe selective tumor embolization.[2,12,16]

Acknowledgement

Our thanks and appreciation to Mark Wholey, M. D., for his advice and assistance.

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The Effects Of High Efficiency Air Filtration System On Nighttime Asthma Attacks

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There was a strong trend for HEPA (high efficiency particulate air) filtration units to reduce the incidence and severity of nightly asthmatic attacks in a two-year study conducted in a summer camp for asthmatic children. When the benefits of the machine were coupled with extended additional treatment, the asthmatic attacks were greatly reduced. The use of high efficiency air filtration units, therefore, must be considered an important adjunct to standard medical/allergy treatment of asthmatic patients.

NOCTURNAL asthmatic attacks, like their daytime counterparts, are of multiple etiology, with factors such as recumbency, dreaming, sleep state, degree of exercise prior to retiring, increased vagal tone during the night, increased exposure to bedroom antigens, pollens, molds, and air pollutants, accumulated thickened bronchial secretions, and adrenocorticosteroid levels playing varying roles from subject to subject.[1,2] Studies in asthmatic adults indicate that nocturnal asthmatic incidents occur throughout the night and out of all stages of sleep.[3] In children, a decrease in asthmatic attacks occurs in stage-four sleep (deep sleep). The asthmatic child has a significant reduction in stage-four sleep, however, and experiences frequent awakenings and a significant decrease in the time spent asleep. It has been suggested that respiratory difficulty exists in the same degree throughout the night, but because of the depth of the sleep during the sleep phase the child does not respond to the disturbing stimulus.[4]

There has been much controversy concerning the effectiveness of air filters in reducing symptoms of bronchial asthma.[5,6] Many devices are effective and many are worthless.[6] Ozone is produced by some electrostatic precipitator units which may actually aggravate asthmatic attacks. The American Medical Association Archives of Environmental Health has specified that a workman can be subjected to no more than 0.10 ppm of ozone during an eight-hour working day, this despite the fact that ozone can be detected by the human nose at about the 0.03 ppm level.[7] In the present study, a decision was made to eliminate ozone-producing air filter units in order to rule out ozone as a possible factor in increasing asthmatic attacks.

Methods and Materials

The study was conducted at Bronco Junction, a 176-acre special camp which provides intensive care and rehabilitation for asthmatic children, located at Red House, Putnam County, West Virginia.[8,9] The Bronco Junction program consists of a two-month summer camp experience and 10-month follow-up. The subjects in the study were boys and girls ages six through 15 who suffered from chronic bronchial asthma. Each subject had been under the care of an allergist prior to attending camp and was treated with "round-the-clock" broncho-dilator medication during the study.

The children lived in converted 40-foot railroad bunk cars with an air volume of 4,000 cubic feet. Each bunk car contained either 14 or 16 bunks and was prepared as allergen-free as possible through the use of dacron or foam rubber pillows and foam rubber mattresses covered with allergen-free encasings, electric air-conditioners with mechanical filter, and sealed, air-tight doors and windows. Modified Sabouraud's media mold plates were exposed for 12 minutes in each of the bunk cars prior to the beginning of camp and during the camp session. Mold spores were found initially in all of the cars. All bunk cars were treated with three-day exposure to formaldehyde prior to the opening of camp in order to render them free from molds as determined by post-treatment mold plate exposure. These became positive, however, within three weeks. The bunk cars were cleaned daily, mopped with Impregon* solution to inhibit mold growth and were subjected to frequent inspections by the camp and medical staff members.

During the first-year study (1973) one filter unit was placed in each bunk car, but in the second year (1974) two units were placed in

*Impregon—2 per cent Solution Tetrachlorsalicylanilide—Fleming Company.

each car. These were diagonally situated in each end of the car to provide an air change seven times an hour. The filters used would screen out particulate matter down to 0.3 microns.

Bunks were matched using age and sex of the campers and were randomly assigned a filter or placebo unit. After one month (first half of the camp season) the units were switched. In addition, arrangements were made to have the prefilters of each unit, both filters and placebos, cleaned once each week to assure their proper function and prevent the placebos from becoming pseudo-filters through the accumulation of foreign material on the intake screens. Seven bunk cars were involved in this study.

The air filtration units were Cleanaire Model 1212, manufactured by Air Techniques Incorporated, Baltimore, Maryland. These consisted of a charcoal impregnated prefilter which screens out large contaminants, a continuous duty blower which is maintenance free, and a high efficency particulate air filter (HEPA) of the type designed for use by the Atomic Energy Commission (99.99 per cent efficient under MIL-F-51068).[10] These components are packaged in an ABS plastic container with a carrying handle making them readily portable. The prefilter requires changing only once every 700 hours of operation and the HEPA filter requires changing only once every five years under average use conditions. The filter and placebo units were coded and the code was broken at the end of the camp season (Figures 1, 2, 3).

In the 1973 study, there were 68 campers comprising 41 male and 27 female subjects, and in the 1974 session there were 62 campers comprising 39 male and 23 female subjects. In

Figure 1. The "Cleanaire" Model 1212 HEPA filter unit.

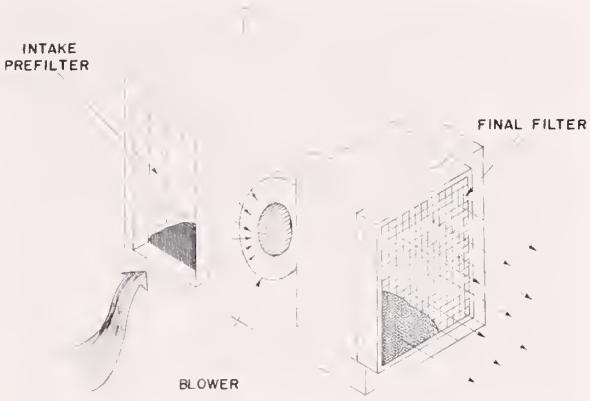


Figure 2. Diagram of HEPA filter unit.

1973, 25 per cent, and in 1974, 29 per cent of the campers admitted were on corticosteroid therapy. Information concerning the campers' symptoms was obtained from the nightly attack record recorded in each bunk car and the infirmary reports. Evaluation was performed using the camp's five-point rating scale as follows:

1 + = attack relieved by (a) breathing exercises and (b) oral fluids

2 + = attack relieved by (a) breathing exercises; (b) oral fluids, and (e) Isuprel® Sublingual tablets 15mg. (Isoproterenol—Winthrop.

3 + = attack relieved by (a) breathing exercises; (b) oral fluids; (e) Isuprel® Sublingual tablets 15mg., and (d) oral medieations (theophyllin, ephedrine, etc.)

4 + = attaek relieved by (a) breathing exercises; (b) oral fluids; (e) Isuprel Sublingual tablets 15mg.; (d) oral medieations, and (e) injections of epinephrine 1:1000 or Susphrine® (Epinephrine 1:200 Cooper)

5 + = infirmary admission of patient

Pulmonary function studies were performed three times daily before meals using either the Wright Peak Flow Meter (Armstrong Industries, Inc., Northbrook, Illinois), the Monaghan Peak Flow Meter (Monaghan Company Division, Sandoz-Wander, Inc., Denver, Colorado), or the Donti Pulmonary Performance Analyzer Model PA-70 (Cavitron Corporation, Englewood Cliffs, New Jersey).

The medical staff at Camp Bronco Junction consisted of the Medical Director, a team of three or four physicians comprised of two or more allergists, a pediatrician, family physician, psychiatrist, and residents or fellows in allergy-immunology, pediatrics, family practice and psychiatry. The infirmary staff consisted of three registered nurses, four student nurses and one medical student. This medical team provided 24-hour service to the asthmatic children attending the camp.

For the purposes of this study an "attack" of asthma was defined as a sensation of dyspnea

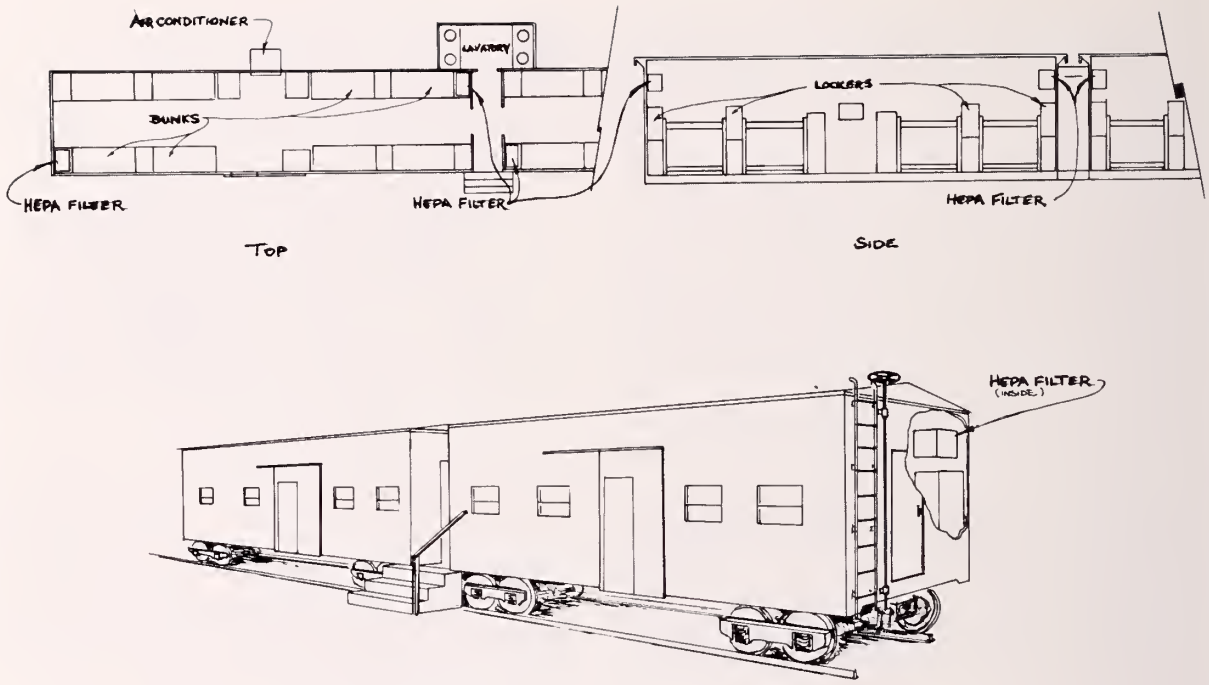


Figure 3. Placement of filter units in bunk cars.

and wheezing sufficient to awaken the patient and to motivate him to signal the observer, or, if awake in his bunk car, to be reported to the observer. The child with continuous low-grade dyspnea and wheezing was continually observed and treatment was administered as required using the above rating scale to determine incidence and severity.

Results

Year-one evaluation. Information concerning the campers' symptoms was obtained from the night attack infirmary reports. Evaluation was performed using the camp's five-point rating scale. Ratings were compared with campers according to bunk car assignments. Because of an outbreak of Varicella at the camp which resulted in prolonged infirmary admissions of some of the campers, data was used only for those campers who remained in the bunk cars for the full camp period. Despite the fact that a complete camper study was not possible, an analysis of variance was conducted and revealed a strong statistical trend (p less than 0.07) for the filter condition to be more effective than the placebo condition as shown in Table 1.

Year-two evaluation. Table 2 presents the means for the treatment groups and Table 3 shows the results of the analysis of variance. There is again a strong statistical trend for the filters to reduce the incidence and severity of the nighttime attacks during both halves of the summer. The data demonstrate that there was a highly significant effect depending on the time during the summer in which the campers had the actual filter units in the bunk cars. Table 2 reveals that the filters were most effective during the first half of the camp session. This seems to be due to the fact that the other treatments provided by the camp helped to reduce rapidly and keep diminished many of the medical and psychological factors involved in asthmatic attacks. In addition, a slight increase in attacks

TABLE 1

Analysis of Variance or the Severity of Nighttime Attacks for Filter and Placebo Treatment for First-Year Study

Source	*SS*	*df*	*MS*	*F*	*p*
Total	324.50	11			
Subjects	182.18	5			
Filter Condition	73.92	1	73.924	5.40	.07
Error	68.39	5	13.678		

TABLE 2

Mean Camper Severity of Attack Score for Filter Group and Order of Presentation for the Second-Year Study

	Filter	*Placebo*
1st Half of Summer	4.82	8.80
2nd Half of Summer	5.05	6.49

Campers sustained less severe attacks under the filter condition, particularly during the first half of the camp season.

TABLE 3

Analysis of Variance of the Severity of Nighttime Attacks for Filter and Placebo Treatments

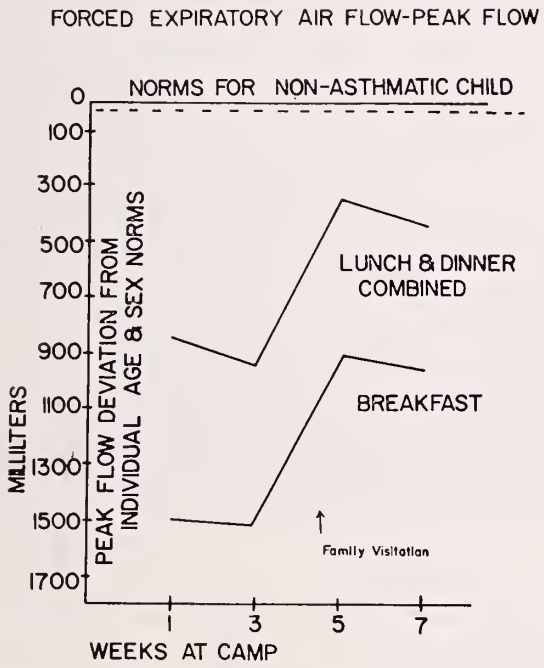
Source	SS	*df*	*MS*	*F*	*p*
Total	10152.44	113	....	....	....
Subjects	8825.44	56	..	..	....
Filter Condition	64.88	1	64.88	3.39	.07
Error	1034.12	54	19.15	...	....

had been noted in previous years following parent visitation day. The cause(s) of this phenomenon is currently being investigated. Although not included in the main analysis, the trend of the daytime pulmonary function studies (peak flow rate) is identical to that obtained using the rating scores (graph). The decline in peak flow rates beginning in the fifth week followed parent visitation day.

There was a strong statistical trend for the campers to have less severe attacks under the filter condition. The significant interaction effect shows that the filters were most useful during the first half of the camp season.

Discussion

The effectiveness of air cleaning systems in screening out airborne allergens has been reviewed by Zeterberg.[11] Criep and Green[12] have reported that electrostatic units are often able to screen out airborne irritants and Zwemer and Karibo[13] have found much success with a high efficiency air filtration unit attached to the headboard of a bed. It has been estimated that there will be a complete change of air about every hour within a closed room due to leakage of air through the cracks around windows and doors. This hourly factor will vary somewhat with the outside air movement. It should be obvious that a filtering device which moves 20 cubic feet of air per minute (c.f.m.) through its filter would not even keep up with the expected change of air in a room 12 by 14 by 8 feet, since such a room contains 1,350 cubic feet of air and the filter would be moving only 1,200 cubic feet of air every hour. In order for a room air cleaner to be effective as a recirculating filtering device, it should move at least 100 c.f.m. Such a device should have a very high efficiency filter. With a low efficiency filter (60 per cent), it would be desirable to move much more air, 200 or 300 c.f.m., in order to do a good job of pollen filtering.[6] The unit used in this study seemed preferable to the standard electrostatic model because it would not produce ozone and was capable of removing all particulate matter 0.3 microns or larger at a rate of 100 c.f.m.[10] Hair, pollen, dust, smoke, mold and some virus particles are larger than this minimum level.



Graph. Composite of 1974 season: Note decline in peak flow rates beginning in fifth week following family visitation day. Peak flow rates were consistently low in morning.

The importance of the trend for the filter unit to reduce the incidence and severity of nighttime asthmatic attacks in both years' studies is magnified when the setting of the study is taken into consideration. It is well known that pollens, molds, inorganic and organic dusts are carried on shoes, skin, hair, and clothing.[14] Children living in a camp setting would constantly carry allergens into the bunk cars. The strong statistical trend seen there would most likely have been a significant difference had the study been conducted in a home or hospital.

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Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

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Postpartum Emotional Disorders

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It's been reported that women have a four to five times higher risk of having emotional problems during the first three months of the postpartum period.[1] *It is much more likely that their contact during that period of time will be with a family physician, pediatrician, or obstetrician rather than a psychiatrist. As with most clinical entities, prompt and appropriate treatment initiated early is usually effective. The following case presentation and discussion will hopefully serve as a reminder of these clinical disorders and raise the level of clinical awareness.*

Case Description

The patient was a 19-year-old white, married, gravida one, para one, female who presented in the West Virginia University Hospital emergency room five days after delivery of a viable, healthy male infant. She had been brought to the emergency room by her family members who were concerned because she was having difficulty breast feeding the infant and was also exhibiting delusional thought content. Her speech revealed sexual and religious inner conflicts. She admitted to suicidal ruminations. She was admitted, therefore, to Behavioral Medicine and Psychiatry Inpatient Service.

Physical examination was essentially unremarkable. Laboratory studies were essentially within normal limits with elevated enzymes compatible with the postpartum period.

Mental status examination revealed an agitated young female whose stream of talk was laced with delusional content. She was oriented to time, place and person. She was not able to perform serial 7's although she was a high school graduate. The remainder of the mental status examination could not be obtained because of the severe agitated condition of the patient.

Past medical and social history obtained from the family was significant only in that she had no previous psychiatric problems and that there were numerous financial and interpersonal stresses within the family situation.

Course Of Treatment

She was started on Haldol 10 mg. q.i.d. along with Thorazine 100 mg. q.i.d. for the first four days. She developed a dystonic reaction on day number four. Her Haldol was cut to 10 mg. t.i.d., the Thorazine was discontinued and she was placed on Artane 2 mg. b.i.d. Her response at this time to the medications was minimal and she was worked up for possible electroconvulsive therapy. At the end of her first week, however, she was participating minimally in group therapy and much of her agitation had dissipated. She continued on the inpatient service for an additional week participating in group therapy, taking her medications well and interacting with her family members. Electroconvulsive therapy was not necessary. She was discharged after approximately two weeks to be followed in the West Virginia University Behavioral Medicine and Psychiatry Outpatient Department. She was discharged on 15 mg. of Haldol q.h.s. She was advised not to breast feed her infant. When seen in the clinic two weeks later she was doing well and she was preparing to return to work. Her medication was cut in half.

Discussion

Emotional changes following a delivery are not at all uncommon. It has been estimated that up to 80 per cent of all women develop an emotional lability during the first 10 postpartum days.[2] This postpartum depression or "baby blues" as they are called are benign and self limiting. They usually require no treatment. The characteristic clinical symptoms usually include crying, fatigue, and irritability. Some authors have included a mild confusional state as part of the syndrome.

While seldom requiring treatment it may be necessary to reassure the woman and her family that such symptomatology is common and does not represent impending mental illness. It is often helpful to advise the family members that during this period of time women are extremely sensitive to rejection. One might also anticipate the concern that the postpartum depression generates in women and discuss the symptomatology and signficance of it during the prenatal office visits.

Not all postpartum psychiatric disorders are benign as the postpartum depression. More severe disorders may range anywhere from ex-

treme agitated depressions to psychotic reactions. Often, there is a combination of signs and symptoms to indicate depression, organic brain syndrome as well as psychotic dysfunction. The clinical picture may be confusing.

Severe Agitated Depression

The symptoms of severe agitated depression are similar to those noted above for the postpartum depression, but much more intense and long lasting. Insomnia, decreased appetite, and crying spells along with a feeling of hopelessness and helplessness usually dominate the clinical picture. There are usually thoughts of guilt and sexual fantasies and suicidal reminations are often present. The depression may be of such a severe nature as to suggest a psychotic reaction with extreme agitation, pacing and poor reality testing.

Psychiatric referral and hospitalization is usually the treatment of choice. Often, a course of antipsychotic medication along with antidepressants are effective, but in some cases electroconvulsive therapy may be necessary. While the treatment may seem aggressive, it is often in this particular clinical situation that the mother may harm either herself or the child. Aggressive therapy is warranted under such conditions.

The clinical presentation may also suggest an organic brain syndrome with memory deficits and disorientation. Many authors have suggested that the sudden drop in the hormonal levels following the delivery may be responsible for the affective disorder noted and that indeed it may be due to an organic etiology. It should be noted here that the clinician should not be misled by a clinical picture that suggests organicity and attribute it necessarily to a postpartum disorder. Metabolic disorders, head trauma, infectious processes, drug overdoses, etc. can occur at this period of time and be unrelated to the recent delivery.

Differentiated By Clinical Course

The psychotic disorder that occurs in the postpartum period may include hallucinations, delusions and a type of manic behavior. Reality testing is impaired. It is often difficult to distinguish from a severe agitated depression. The postpartum psychosis may be differentiated from acute onset of schizophrenia by its clinical course. The postpartum psychosis usually clears and leaves little residual in contrast to schizophrenia which usually requires long-term therapy.

While the organic factors noted above (that is, changing hormonal levels) are implicated by most authors as the etiology of the postpartum disorders, it is most likely that a complex interaction between organic, social and psychological factors must be taken into account to explain the varied clinical presentations.

Conclusion

While the postpartum disorders can vary widely in their clinical presentation, ranging from mild postpartum depression to psychotic disorders, recognition of the disorder and immediate treatment often offer excellent opportunities for improvement.

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Medical Grand Rounds

From the West Virginia University Medical Center

Edited By
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Multiple Myeloma Management

Discussants:

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American Cancer Society Fellow in Medical Oncology, WVU Hospital, Morgantown.

RAYMOND B. WEISS, M. D.
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Doctor Doll:

Case History No. 1

A 53-year-old male was seen at WVU in March, 1974, for further evaluation and treatment of multiple myeloma. In February, 1974, he noticed the gradual onset of low back pain. This pain became progessively worse so that he required admission to the hospital.

Roentgenographic bone survey revealed multiple lytic lesions in the skull, pelvis, ribs, and there were compression fractures of the spine. A bone marrow aspirate was totally replaced by plasma cells. The IgA level on serum immunoelectrophoresis was 780 mg per cent (normal value: 170-400 mg per cent). There were 5.5 grams/24 hours of Bence Jones protein in the urine. The hemoglobin was 10.5 gm per cent, platelet count 120,000, and sedimentation rate was 122 mm/hr. The BUN, serum calcium, and serum creatinine were normal.

A diagnosis of IgA multiple myeloma was made, and the patient was placed on a Cancer and Leukemia Group B (CALGB) investigational protocol. He received combination chemotherapy consisting of intermittent carmustine (BiCNU or BCNU), melphalan (Alkeran), cyclophosphamide (Cytoxan), and prednisone. With treatment the serum IgA level decreased to 490 mg per cent, the bone pain decreased such that he was able to return to work, and his bone marrow improved considerably. A recent marrow aspirate showed 27 per cent plasma cells. There was also a marked decrease in his proteinuria. Fluoxymesterone (Halotestin), an androgen, was used intermittently to augment his hemoglobin. At three years' follow-up since diagnosis, he feels well and has no complaints.

Case History No. 2

A 61-year-old male presented to the emergency room at WVU in April, 1974, with a four-day history of chills, fever, cough, sore throat and malaise. Leukopenia and anemia were found on blood count, and he was admitted to the hospital.

The physical examination was negative except for a mildly enlarged spleen and liver. The hemoglobin was 9.0 gm per cent, white blood count 2800, platelet count 178,000, and sedimentation rate was 5 mm/hr. Total replacement of the marrow by plasma cells and plasmablasts was found on bone marrow aspirate and biopsy. Serum immunoelectrophoresis showed hypogammaglobulinemia with free kappa light chains. A 24-hour urine protein electrophoresis demonstrated 4.15 grams of protein of which 3.2 grams were Bence Jones kappa protein. Multiple lytic lesions and osteoporosis were seen on roentgenographic bone survey. The serum creatinine was 1.5 and the BUN was 25. Serum calcium was normal.

A diagnosis of light-chain type multiple myeloma was made. He was placed on a CALGB investigational protocol and received intermittent Alkeran and prednisone. Halotestin was used to stimulate erythropoesis. Repeat protein studies after three months of treatment showed no change. Thus his therapy was changed to Cytoxan, BCNU, and prednisone.

During the following year the patient felt better and resumed working. There was no

significant change in his urine protein or his marrow. His therapy was continued because of his subjective improvement and eventually his urine protein decreased to less than 1 gm/24 hrs. Currently he is doing well without any complaints except easy fatigability. He has required no transfusions and no further admissions to the hospital since the initial diagnosis three years ago.

Discussion

Multiple myeloma is a malignant disorder of plasma cells which typically involves the bone marrow but may involve other organs as well. The plasma cells produce a specific immunoglobulin or immunoglobulin subunit (light or heavy chains), or both, in excess. The excess immunoglobulins produced comprise one heavy chain class (IgA, IgG, IgM, IgD, or IgE) and/or one light chain class (kappa or lambda), and they are often referred to as an M protein or myeloma protein.

The first clinical report of a patient known to have multiple myeloma was by John Dalrymple in 1846. In 1847, William MacIntyre examined the urine of a patient with myeloma and sent it to his friend, Henry Bence Jones. Doctor Jones then described the urine abnormality which subsequently bears his name. In 1873, a Russian physician named Rustizky coined the term multiple myeloma when he described a patient with multiple osteolytic lesions, anemia, renal insufficiency, and plasmacytosis.

Multiple myeloma accounts for about one per cent of all malignant disease and slightly more than 10 per cent of all hematologic malignancies. In 1977, there will be an estimated 8,200 new cases of multiple myeloma with 5,600 deaths in the United States.[1]

Clinical Manifestations

The median age at the time of diagnosis of multiple myeloma is about 60 years, with a range of 30 to 90 years. The highest incidence of myeloma is found in the age group of 60 to 65 years.[2] Myeloma is very rare under age 30, but there are some well-documented cases occurring in patients in their twenties.[3]

Bone pain is the most frequent initial complaint of patients with myeloma, especially in the lumbar and thoracic spine.[4-6] The pain is usually worse with movement, and it may be sudden in onset and extremely severe. Other common initial manifestations are anemia, loss of weight, pathologic fractures, infection, neurologic manifestations, hemorrhagic tendency, hepatomegaly, and splenomegaly.[4-6]

Sometimes multiple myeloma may present with symptoms of hypercalcemia, carpal tunnel syndrome, or as a solitary plasmacytoma.[7] Although the hyperviscosity syndrome is more common in Waldenstrom's macroglobulinemia, it can also be a presenting problem of myeloma. Hyperviscosity syndrome usually occurs in IgG myeloma when serum IgG levels are greater than 5 gm/100 ml.[8] The signs and symptoms typical of this syndrome are visual disturbances, bleeding from mucous membranes, and various central nervous system abnormalities. We have seen one patient who had hyperviscosity syndrome as the initial problem that led to a diagnosis of myeloma.[7]

Diagnosis

If the diagnosis of multiple myeloma is suspected, certain tests are useful (Table 1). A complete blood count, platelet count, sedimentation rate, serum chemistries, and urinalysis should be obtained. A bone marrow biopsy and aspiration should be performed, and serum and urine immunoelectrophoresis should be done. If one is seeking Bence Jones protein in the urine, the simple dipstick method for urine protein as well as the traditional heat test for Bence Jones protein are not sufficient. The dipstick test mainly detects albumin, not light chains (Bence Jones protein). The simple heat test for Bence Jones protein has too many false positive and false negative results to be completely reliable. Thus urine protein electrophoresis and immunoelectrophoresis are the diagnostic tests of choice when trying to demonstrate monoclonal light chains in the urine. All of these tests will aid in the diagnosis of approximately 99 per cent of the cases of multiple myeloma. Only about one per cent of myeloma cases have no serum or urine protein abnormalities.

Approximately 50 per cent of the cases of multiple myeloma will be IgG type, 20 per cent IgA, and 20 per cent light chain disease.[9] Less commonly, IgD, IgE, IgM, and "non-secretory" myeloma are found.

TABLE 1
Diagnostic Tests for Multiple Myeloma

Complete blood count, platelet count
Erythrocyte sedimentation rate (ESR)
Serum calcium, blood urea nitrogen (BUN)
Serum protein electrophoresis and immunoelectrophoresis
24-hour urine protein electrophoresis and immunoelectrophoresis
Bone marrow biopsy and aspiration
Roentgenographic bone survey

A bone survey is helpful in looking for lytic lesions or generalized osteoporosis. Myeloma is one neoplasm where the bone survey yields better results than a bone scan. Serum viscosity and cryoglobulins can be ordered if there are suspected abnormalities in these tests.

Patients who present with a solitary lytic lesion, pathologic fracture, or a soft tissue mass should have a biopsy of their lesion. If a plasmacytoma is diagnosed, then additional studies as outlined previously should be obtained to determine whether the lesion is truly solitary or just one manifestation of disseminated myeloma.

Treatment

Before the introduction of alkylating agent treatment, patients with multiple myeloma rarely survived one year.[2] Melphalan (Alkeran), an alkylating agent, was first used by Blokhin *et al*[10] in 1958 to treat multiple myeloma. Cyclophosphamide (Cytoxan), another alkylating agent, was subsequently used with the same success as melphalan. Along with prednisone these are the most frequently used agents in the treatment of multiple myeloma. Other agents used are listed in Table 2.

Alkylating agents used alone produce an objective improvement in 30 to 50 per cent of patients with plasma cell myeloma while increasing their survival and quality of life significantly.[11] An objective response in myeloma is determined by a decrease of at least 50 per cent in the abnormal serum or urine protein, decrease in the number of bone marrow plasma cells, recalcification of bone lesions, increase in hemoglobin, or return of the serum calcium, BUN, or creatinine to normal if they were originally abnormal.

To improve the results of single alkylating agent therapy, combination chemotherapy has been utilized. Alexanian *et al*[12] used a combination of melphalan and prednisone. They reported an increased response rate for the combination, but not a statistically signficant increase in survival compared to the use of melphalan alone. The median remission duration for responding patients treated with melphalan-prednisone was approximately two years.[12] On the other hand, CALGB and the Eastern Cooperative Oncology Group[13] reported both an increased response rate and increased survival for those patients treated with melphalan and prednisone compared to melphalan alone in good-risk patients. Patients were classified good risk if they met all of the following criteria: (1) BUN less than 30 mg/100 ml; (2) serum calcium less than 12 mg/100 ml; (3) absence of significant infection at the onset of study; (4) white blood count greater than 4000/mm^3 and platelet count greater than 100,000/mm^3; and (5) estimated survival of greater than two months. All other patients were classified poor risk. In good-risk patients the combination of prednisone and melphalan produced a 55 per cent response rate and 53 months median survival versus 23 per cent and 30 months, respectively, for melphalan alone. There was no similar advantage in the addition of prednisone in poor-risk patients.

TABLE 2
Chemotherapeutic Agents Active in Multiple Myeloma

Melphalan (Alkeran)
Cyclophosphamide (Cytoxan)
Carmustine (BiCNU or BCNU)
Procarbazine (Matulane)
Doxorubicin (Adriamycin)
Vincristine (Oncovin)
Cytosine Arabinoside (Cytosar)

The Southwest Oncology Group reported the effect of various regimens of melphalan combination chemotherapy in 508 patients.[14] The addition of procarbazine (Matulane) or vincristine (Oncovin) to melphalan-prednisone combination produced no additional effect over melphalan-prednisone alone. As part of the study they also randomly assigned responding patients after one year to no further chemotherapy, continuous courses of melphalan-prednisone, or BCNU-prednisone. They found that continued melphalan-prednisone had no additional value in patients who had already achieved an objective remission. In fact, they found that continuous therapy may be detrimental because patients receiving continued chemotherapy had a higher incidence of pneumonia and Herpes zoster than those not receiving continuous therapy.

Chemotherapy produces no cures in multiple myeloma. Responding patients eventually develop resistance to their initial chemotherapy. Bergsagel[15] reported that one third of myeloma patients resistant to melphalan had an objective remission from high dose, intermittent cyclophosphamide. We have used this drug as second-line therapy and have seen some responses, but we don't feel that the response rate is this high. Unlike most malignancies, myeloma may not show cross resistance to a different alkylating agent. Doxorubicin (Adriamycin) and BCNU in combination have also been shown

to have an effect for multiple myeloma in relapse after melphalan treatment.[16]

Complications of chemotherapy include blood count suppression, nausea and vomiting, alopecia, and an increased incidence of infections such as Herpes zoster and pneumonia. Acute leukemia has been reported after prolonged survival in myeloma patients treated with alkylating agents.[17] Although there may be a correlation between the administration of alkylating agents and the production of acute leukemia in patients receiving long-term therapy with melphalan, the incidence of leukemia is small and, in patients with myeloma, the risk is certainly justified. The increased survival and better quality of life from treatment are preferred to early death without treatment.

Ancillary Measures in Treatment

Multiple myeloma is a radiosensitive tumor. Solitary plasmacytomas, painful lytic lesions not relieved by other means, pathological fractures, and collapsed vertebrae are all amenable to radiation therapy.

Hypercalcemia, occurring in 10 to 30 per cent of patients with myeloma, should be treated vigorously to prevent permanent renal damage. Intravenous fluids, diuretics, steroids, sodium and potassium phosphate mixtures, and mithramycin are all effective measures for treating hypercalcemia.[18] Most patients will respond to fluids, diuretics, and steroids. Chemotherapy should also be initiated concurrently. Since the hypercalcemia is secondary to the myelomatous process, when the myeloma responds to treatment, the calcium will return toward normal. Ambulation, mild exercise, and analgesics to prevent pain are all helpful in preventing hypercalcemia.

Bacterial infection is a frequent and serious complication of multiple myeloma and is the leading cause of death in these patients. Pneumonia and urinary tract infections occur most frequently.[2] Treatment of infection should be aggressive; areas of suspected involvement should be cultured immediately and appropriate antibiotics initiated. Pneumococcal pneumonia and/or sepsis is the most common significant infection and should be treated with penicillin. These patients also have a high incidence of infection with more resistant organisms, and treatment with other antibiotics such as cephalothin (Keflin) and gentamicin (Garamycin) should be instituted when appropriate.[18] The prophylactic administration of gamma globulin has not been effective in preventing infection.[19]

Although the hyperviscosity syndrome occurs uncommonly in multiple myeloma,[8] when signs and symptoms secondary to increased viscosity are present, plasmaphoresis should be initiated. This procedure may produce a dramatic result with cessation of symptoms.[7]

Anemia appears in most patients with myeloma. There are multiple mechanisms for this anemia. Overgrowth of plasma cells in the marrow, chemotherapy, irradiation, bleeding, infection, hemolysis, and renal failure may all be contributing factors. Transfusions may be necessary for symptomatic anemia or bleeding. Androgens have been found to be of some benefit in raising the hemoglobin in patients with myeloma.[20] Generally we have used oral Halotestin, but other androgens are also available such as nandrolone (Durabolin).

Patient Follow-Up

Myeloma patients being treated with chemotherapy should have frequent blood counts including CBC, platelet count, and sedimentation rate. Serum calcium, serum creatinine, and BUN should also be checked periodically. Serum and urine immunoglobulins should be followed for response to therapy. These tests are more important than doing repeated bone marrows as multiple myeloma may have an unequal distribution throughout the marrow space, and serial marrow aspirates may vary because of site of biopsy rather than treatment response. Skeletal x-rays of specific areas as well as bone surveys are useful in assessing changes in the bone manifestations. These tests will detect changes in almost all patients with myeloma and will be helpful in assessing remission or discovering progression of disease indicating a need for changing therapy.

Summary

Great strides have been made in the management of certain malignant tumors. Adequate chemotherapy has increased average survival of multiple myeloma from less than a year before alkylating agents to over four years in good-risk patients.[13] Earlier diagnosis, improved methods of treatment, and continued research in immunoglobulin structure and function have all contributed to the prolonged survival and quality of life for these patients. New drugs and new combinations of existing therapy are being tested with the hope that further progress can be accomplished. Multiple myeloma will continue to be an area of research for those involved in the diagnosis and management of patients with cancer.

Doctor Weiss:

I would like to emphasize several points Doctor Doll has made. As previously stated, bone pain, particularly in the spine, is a frequent presenting symptom of myeloma. Persistent back pain in the age group at which myeloma is common warrants a consideration of this malignancy. We have seen patients who have had symptoms for months before diagnosis of myeloma, and they are passed off as having only osteoarthritis with no investigation of the complaint being accomplished. Upon referral, their disease was in such an advanced state little response could be achieved that slowed their downhill course. The diagnosis is usually relatively easily accomplished as outlined. A bone marrow aspirate is a simple procedure and the tumor marker (the abnormal immunoglobulins) found in most cases is readily detected in the serum and/or urine.

Although no one is ever cured of this disease, as demonstrated by the two patients presented, long survivals with few symptoms can be achieved in a large percentage of the cases. Compared to the complex therapy with unpleasant side effects necessary in treating some other systemic malignancies, the treatment of myeloma is relatively uncomplicated. In spite of many efforts to improve on alkylating agent—prednisone therapy, there has not been much progress made. Our current investigative efforts compare alternating cyclophosphamide and melphalan-prednisone at monthly intervals with the use of a combination of adriamycin, cyclophosphamide, and prednisone on a randomized basis; that is, half the patients will be treated with the former regimen and half, the latter.

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A message from . . .

The President

DOES IT MATTER WHAT YOU CALL IT?

The distressing aspect of the socialization of America which concerns me is the lack of incentive for excellence. In our bureaucratic scheme of things, excellence is actually discouraged.

You've heard it said many times, "Don't make waves. Keep the status quo." Well, the medical profession is always alert to change and striving for excellence. We experimented with a three-year medical school curriculum but most schools returned to a four-year, nine months schedule. We have developed group practice and pre-paid health care plans on a voluntary basis.

Now the Federal planners feel that we will embrace socialism if the name is changed to National Health Insurance. Even organized medicine has a National Health Insurance bill! I hope we won't be fooled by semantics. Socialism is synonymous with bureaucratic controls, and both destroy excellence.

John J. Mahood

JOHN J. MAHOOD, M. D., *President*

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EDITORIALS

QUALITY ASSURANCE

There has been a lot of talk around the state recently about the advisability of setting up HMO's. We have already discussed (November, 1976, issue of *The Journal*) the pros and cons of an HMO operation and pointed out that in such a system the major change for physicians is the assumption of the role of *rationer* of medical care.

We have also recently (April, 1977) discussed PSRO's and their function of putting a brake on uncontrolled hospital and medical care costs. PSRO's thus achieve for private medical practice the same end that the physician in his rationing role achieves for an HMO—cost control.

HMO services, like private practice care, are also subject to PSRO review and this brings about an interesting situation. Those initials, we remind you, stand for Professional Standards Review Organization.

The original law mandating the establishment of a network of PSRO's was passed in Congress while its members were still a little too finicky to talk openly about the delicate subject of cost control through rationing medical care. The rationale for passage of the bill, therefore, was that PSRO's would provide Quality Assurance in medical care and. indeed, PSRO's now report to BQA, Bureau of Quality Assurance of the Department of Health, Education and Welfare. We knew, however, and were indelicate enough to broadcast about the real objective. But in spite of this, the bill became law.

To this point the concern of PSRO's in regard to professional standards has been to determine that the hospitalized patient is indeed sick, that studies are appropriate to the presumed diagnosis and that unnecessary hospital admissions or excessive hospital stays do not occur.

HMO's get PSRO gold stars in the cost control department. They need—in fact must have—the gold stars. Otherwise the HMO goes bankrupt and the doctor does not get paid. Proper motivation can accomplish wondrous things.

But then there is that matter of Quality Assurance. PSRO's seem well designed to deal effectively with the tendency to provide an excess of quality by the construction of ceilings for appropriate degrees of quality in the treatment of various diagnoses. We understand they have achieved some laudable measure of success in thus holding down costs. We wonder, however, how good they are at constructing floors and basements to contain the tendency of that same quality to trickle off through open gaps and cracks and ill-formed joints.

Concern about quality of medical care provided the initial impetus for the establishment of the American Medical Association, of the West Virginia State Medical Association and, for that matter, of all professional medical organizations. That same concern is the bedrock of our continuing existence. PSRO's so far have concerned themselves with shaping and controlling quality at the top by pushing down. Our tradition has been to direct our attention at the bottom and push up. We do not plan to abandon that tradition.

We trust that PSRO's share our concern about the bottom limits of quality in medical care and that they will be able to demonstrate this concern by the assurance of quality in every manner of medical care.

AMITRIPTYLINE AND PROPHYLAXIS OF MIGRAINE

Much has been written concerning the treatment and prevention of migraine. It has been estimated that approximately 13 per cent of the population may have migraine and possibly 10 per cent of these persons may have severe, frequent headaches. Migraine must be considered as a serious disorder, and any agent which can reduce significantly the number of attacks or diminish their severity deserves our careful attention. Relatively recently, Couch *et al*[1] reported the effect of amitriptyline, a well-known antidepressant agent, on the prophylaxis of migraine.

Amitriptyline was administered to 110 patients with severe migraine. The amount used varied on an individual basis, but over 90 per cent of the patients were taking from 50 to 75 milligrams per day at the time of the first follow-up period. The average duration of therapy was 5.4 weeks. The authors reported that amitriptyline was highly effective in reducing frequency and duration of headaches of all grades of severity, and that, interestingly enough, the amelioration was most striking in disabling and severe headaches. In these last mentioned instances the average frequency decreased by about 55 per cent and the average duration decreased by 60 per cent. In those who suffered only moderate and mild headaches the average frequency fell by about 45 per cent and the duration diminished by 40 per cent. Statistically, these figures were highly significant.

It is well known that migraine is often associated with mental depression; indeed, this latter condition may usher in an attack of migraine. Mental depression can be a very troublesome symptom, and often produces marked irritability. As a rule, as the attack of migraine alleviates the mental depression lifts. Couch *et al* studied this phenomenon in their patients. The amount of depression was measured with the Zung self-rating depression scale, and was found to be absent in 40 patients, borderline in 53, and moderate to severe in 17. The depression ratings improved minimally with therapy, but it was observed that there was a weak relationship between improvement in depression and improvement in migraine.

From their rather exhaustive studies on 110 patients the authors concluded that amitriptyline is effective in migraine prophylaxis and that it has a primary effect on migraine. Its performance, however, was relatively independent of its antidepressant action.

1. Couch JR et al: *Neurol* 26:121, 1976.

MORE FAMILY DOCTORS

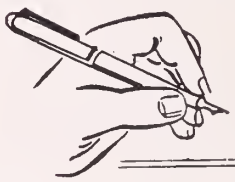
Not many months ago we were told by a respected Parkersburg physician that the need for doctors to establish family practices could not be over-emphasized. It was no reflection, he pointed out, on doctors who practice in specialized fields, since these members of the medical profession were immeasurably helpful to the fraternity as a whole.

Now, according to a UPI dispatch, 11 doctors plan to establish family practices in nine West Virginia cities, including St. Marys and New Martinsville. The opening of these offices is scheduled for July 1.

All 11 doctors are specialists in family care, according to Dr. John W. Traubert, Chairman of the West Virginia University Medical Center's Department of Family Practice. Traubert said the doctors are "first graduates of a unique three-year program that has made them specialists in the field of family medical care. . ."

"This is the profession's first contribution toward ending the shortage of doctors in West Virginia," Traubert said.

It is welcome news to the public at large and the overworked doctors to learn that these young and highly trained family physicians are accepting the challenge and responsibility of providing essential care in smaller community surroundings. . . —*Parkersburg News, April 22, 1977.*



Our Readers Speak

Needs Insect Sting Data

I am convinced that lives now needlessly lost due to severe systemic reactions to insect stings could be saved. How? By a greater awareness of the possibility of such fatal reactions plus knowledge of the existence of an insect sting kit. The kit is an emengency first aid measure to stave off anaphylaxis. Because of my convictions I am presently collecting and correlating data on the incidence of such fatalities.

I am especially interested in time lapse between sting and death although information concerning the following would be helpful: (1) time sequence of symptoms, (2) previous reactions to insect stings, (3) medication on hand at time of sting, (4) type of medication, (5) type of insect, (6) number of stings, and (7) estimation as to whether or not a physician or hospital emergency room could have been reached in time to avoid a fatal outcome.

Thank you.

Claude A. Frazier, M. D.
4-C Doctors Park
Asheville, North Carolina 28801

GENERAL NEWS

Surgeons, Dermatologist Scheduled For Annual Meeting Program

Three additional speakers for the 110th Annual Meeting of the West Virginia State Medical Association have been announced by Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee.

Charles M. Davis, Jr., M. D.

Edwin C. James, M. D.

The Annual Meeting will be held August 24-27 at The Greenbrier in White Sulphur Springs.

Speaking during a symposium on "Management of the Multiple Trauma Patient" scheduled for the first general session Thursday morning, August 25, will be Drs. Charles M. Davis, Jr., of Morgantown, and Edwin C. James from the University of North Dakota in Grand Forks.

Clark E. Julius, M. D.

Dr. Clark E. Julius of Knoxville, Tennessee, will speak during the third general session Saturday morning.

Doctor Davis will discuss "Orthopedic Aspects of the Patient with Multiple Injuries," while Doctor James will talk about "Diagnosis and Treatment of Arterial Injuries."

As previously announced, Drs. John J. Rick of Morgantown and Thomas W. Langfitt from the University of Pennsylvania will be the other speakers for the Thursday morning symposium.

Dr. James T. Boland, Professor and Chairman, Department of Surgery, Charleston Division/West Virginia University Medical Center, will be the moderator.

"Herpes Simplex, Type I and Type II" will be the topic of Doctor Julius' address Saturday morning. State Medical Association President John J. Mahood, M. D., of Bluefield will moderate this session.

WVU Orthopedic Surgeon

Doctor Davis, Associate Professor of Orthopedic Surgery at the WVU School of Medicine, has been a member of the WVU staff since 1972. He currently is Assistant Chief of Staff of the WVU Hospital.

Doctor Davis is certified by the American Board of Orthopedic Surgery and is a Fellow of the American Academy of Orthopedic Surgeons.

He was graduated from Yale University and received his M. D. degree in 1956 from the University of Pennsylvania School of Medicine in Philadelphia. He served his internship and residency at the University's hospital and, from 1961 to 1972, was in private practice and was Instructor in Orthopedic Surgery at the University's School of Medicine.

His research interests lie in the areas of biomechanical aspects of fracture healing, and vertebral osteomyelitis.

Goes To North Dakota

Having served as Associate Professor of Surgery at the WVU School of Medicine until this month, Doctor James now is Professor and Head of the Division of Thoracic Surgery at the University of North Dakota in Grand Forks.

Doctor James, who joined the WVU staff in September, 1975, is certified by the American Board of Surgery and the American Board of Thoracic Surgeons.

A native of Lordsburg, New Mexico, Doctor James served as a combat medical aidman in Korea and later obtained his B. A. and M. D. degrees from the University of Oregon.

Completing his postgraduate surgical training in the Army Medical Corps, he served a rotating internship at Walter Reed General Hospital and residencies in general surgery and thoracic and cardiovascular surgery at Ireland Army Hospital at Fort Knox, Kentucky; Madigan Army Medical Center, Tacoma, Washington, and Letterman Army Medical Center, San Francisco.

Doctor James has served as a general medical officer at the Army Hospital, White Sands Missile Range, New Mexico; as Chief of the Department of Surgery and consultant to the Eighth Army Surgeon for both general and thoracic surgery at the 121st Evacuation Hospital in Seoul, Korea; and as Chief of the General Surgery Service at Valley Forge General Hospital in Phoenixville, Pennsylvania.

He went to WVU from Madigan Army Medical Center, where he was Chief of the Thoracic Surgery Service, staff general surgeon, and Director of Intern Training.

Doctor James is a Fellow of the American College of Surgeons and a member of the Society of Thoracic Surgeons. He is the author or co-author of a number of articles related to thoracic and vascular surgery and the management of trauma.

Knoxville, Tennessee, Dermatologist

Doctor Julius, a native of Harlan, Iowa, is Head of the Division of Dermatology and Instructor of Clinical Dermatology at the University of Tennessee Memorial Research Center and Hospital in Knoxville. He has held these appointments since July, 1971.

Doctor Julius was graduated from Mankato (Minnesota) State College and received his M. D. degree in 1965 from the University of Iowa. He interned at the University of Tennessee Memorial Research Center and Hospital and did graduate work in dermatology at the University of Arkansas Medical Center in Little Rock from 1968 to 1971. He was certified by the American Board of Dermatology in 1972.

Doctor Julius is a member of the American Society of Dermatology and the Society of Investigative Dermatology. He served with the U. S. Navy in Memphis, Tennessee (Naval Hospital), and Vietnam from 1966 to 1968.

Other Program Plans

It was announced previously that other prominent physicians will present papers concerning psychiatry and venereal disease during the second general session Friday morning.

It also was announced that Governor John D. Rockefeller IV will deliver the Thomas L. Harris Address during opening exercises Thursday morning.

Sections and societies affiliated with the State Medical Association are scheduling breakfast and other scientific and business meetings on Friday and Saturday.

The Association's Council will hold its regular pre-convention meeting on Wednesday morning. The first session of the House of Delegates on Wednesday afternoon will be followed on Saturday afternoon, August 27, by the second and final House session.

A workshop for component medical society officers, as announced previously, will conclude the third general session on Saturday morning. All physicians—especially the president, secretary and treasurer of component societies—are urged to attend.

Marshall Medical School Announces Six New Faculty Members

Six new faculty members are scheduled to join the Marshall University School of Medicine this summer, Dr. Robert W. Coon, Dean of the School, announced.

This brings the School's total of full-time faculty members to 27, and additional appointments are expected to be made soon, Doctor Coon said.

A total of more than 60 full-time faculty members is expected when the school is fully developed. In addition to these, physicians from the area's medical community will share their expertise, serving as medical educators on a part-time basis, Doctor Coon said.

The recent appointments include:

—Dr. Talmadge R. Huston, Associate Professor of Family Practice Medicine;

—Dr. Robert A. Brace, Associate Professor of Physiology.

—Dr. Susan DeMesquita, Assistant Professor of Physiology.

—Dr. Barry E. Watkins, Assistant Professor of Physiology;

—Dr. Robert J. Crisalli, Assistant Professor of Medicine;

—Dr. John C. Huntwork, Assistant Professor of Medicine.

Doctor Huston, who received his M. D. degree from Western Reserve University, has been the full-time physician with Marshall's Student Health

Services since 1974. As a member of the Family Practice Department, Huston was to continue in this role when the Family Care Outpatient Clinic assumed responsibility for the campus health services on July 1.

Doctors Brace and Watkins earned Ph. D. degrees from Michigan State University. Doctor Brace is teaching at the University of Mississippi's School of Medicine, while Doctor Watkins is a faculty member at the School of Medicine of the University of Missouri at Columbia.

Doctor DeMesquita earned her Ph. D. degree from Thomas Jefferson University at Philadelphia and has been teaching at the University's Jefferson Medical College.

A graduate of Emory University's School of Medicine, Doctor Crisalli is completing a two-year fellowship in pulmonary medicine at the Georgetown Medical Service, District of Columbia General Hospital, where he served a medical residency.

Doctor Huntwork, a rheumatology specialist, earned the M. D. degree from the University of Chicago's Pritzker School of Medicine. He is a rheumatology instructor at the University of Kentucky Medical Center, where he also served an internal medicine residency and held a rheumatology fellowship.

Spring Council Session Covers Wide Range of Topics

The West Virginia State Medical Association's Council covered a wide range of subjects at its May 22 Spring Meeting in Charleston, including approval of plans to develop further a year-around legislative program.

It likewise elected to honorary or retired membership an unusually large number of physicians in line with Constitution and Bylaws changes adopted by the House of Delegates at last year's Annual Meeting at The Greenbrier in White Sulphur Springs.

The Council extended special recognition to Dr. Russel Kessel of Charleston, a past Association President, for his years of professional service in general, and his leadership in formation of the medical scholarship program. Doctor Kessel was ill as Council met.

In other action, the Council:

—Heard reports from Mrs. Betty Kirkwood, Executive Director of the West Virginia Medical Institute, Inc., on further development of the Professional Standards Review Organization (PSRO) program in the state; and from Execu-

Alpha Omega Alpha lecturer Dr. A. McGehee Harvey (standing, left), Eli K. Marshall, Jr. Professor of Medicine and Director Emeritus of the Department of Medicine at The Johns Hopkins University School of Medicine, is shown before his talk this spring at the West Virginia University Medical Center when he met School of Medicine senior Scott Radow (standing, right) of Charleston, President of the honor medical society, and newest members of AOA, including (from left, first row) Stephen P. Cassis, Charleston; Joseph M. Neal, Huntington; Patricia C. Evans, Glen Dale; Dale R. Pokorney, Wheeling, all Class of 1978; David J. Larkin, Princeton, Class of 1977, and Richard G. Spurlock, Huntington, Class of 1978; (second row) Larry K. Cantley, Big Chimney, Davis H. Shingleton, Garrardstown, David M. Baughan, Huntington, Matthew B. Vukoson, Morgantown, and Katherine Huffman, Princeton, all Class of 1977. Also inducted at the group's banquet that day were Darrel K. Quick, Elkview, Class of 1977, and Jerry E. Squires, Morgantown, and George E. Pritt II, Charleston, Class of 1978. Doctor Harvey's lecture topic was "Some Observations on Paraneoplastic Syndromes."

tive Director James T. Suter of the West Virginia Health Systems Agency, Inc.

—Gave detailed consideration to further proposed changes in the Association Bylaws to cover early retirement resulting from illness or other situations; temporary absence from active practice because of illness; clarified membership status for physicians in residencies; and retirement of physicians whose professional activity has included periods of military service.

—Generally reviewed legislative and other activity involving the Association in recent months as a prelude to preliminary consideration of areas in which the Association might desire to sponsor legislation in 1978.

Elected to honorary membership were these physicians:

Drs. Francis L. Coffey, Walter R. Wilkinson, Chauncey B. Wright and Clarence H. Boso, all of Huntington; Harry E. Baldock, R. Edward Hamrick, Russel Kessel, Paul H. Revercomb, Lloyd E. Cox, W. Paul Elkin, Robert D. Ketchum, William Owen McMillan, E. D. Staats and R. L. Webb, all of Charleston;

John C. Condry of Nokomis, Florida, and James L. Hager of Colonial Beach, Virginia, also former active members of the Kanawha Medical Society (Charleston): Harry C. Fleming, Claude S. Lawson, Jr., and E. D. Wise, Fairmont; Frank S. French, Glen Dale; William Paul Bradford, Moundsville; Upshur Higginbotham and Henry F. Warden, Jr., both of Bluefield;

George O. Martin, Martinsburg; James P. Baker, White Sulphur Springs; P. E. Prillaman, Hinton; Sobisca S. Hall, Clarksburg;

Charles F. Dent of Sun City, Arizona, formerly of Morgantown, and C. Truman Thompson, Morgantown; Harold G. Little and J. O. Rankin, both of Wheeling, and two former Wheeling residents, D. E. Greeneltch of Sun City, Arizona, and C. B. Buffington, Fallbrook, California; P. R. Wilson, Piedmont, and Harold B. Luscombe, Beckley.

Elected to the retired membership category established by the 1976 Bylaws change were Drs. W. P. Hamilton of Germantown, Ohio, and Harold Van Hoose of Fort Myers, Florida, former active members in Logan County; John F. Stecker, Morgantown; N. F. Sabbagh of Hudson Falls, New York, formerly of Preston County; A. L. Batalion of Middlebourne, and T. B. Gordon and Kent M. Hornbrook, both of New Martinsville.

Shown above are some of the officers and speakers who participated in the National Spring Meeting of the West Virginia Academy of Ophthalmology and Otolaryngology at The Greenbrier in White Sulphur Springs in April. In the ophthalmology group (left photo) are, from left, first row, Drs. J. Elliott Blaydes, Bluefield, Secretary-Treasurer; S. Arthur Bonnehoff, Boston, and Jorge Buxton, New York City; second row, Drs. Robert E. O'Connor, Charleston; Richard Keates, Columbus, Ohio, and Albert C. Esposito, Huntington, a Director; third row, Drs. Richard D. Richmond, Beckley, and George Weinstein, San Antonio, Texas. In the otolaryngology group (right photo), from left, first row, are Drs. Philip M. Sprinkle, Morgantown, a Director; Alan M. Nahum, San Diego, California, and James A. Crabtree, Los Angeles; second row, Drs. William C Morgan, Jr., Charleston; Fred D. Owens, Dallas, Texas, and Paul H. Ward, Los Angeles. Other new officers elected during the meeting are Drs. Trevelyn F. Hall, Fairmont, President; R. Lawrence Dunworth, Huntington, Vice President, and Nime K. Joseph, Wheeling, Director. The 1978 meeting will be held April 26-29 at The Greenbrier.

Dr. Robert L. Smith Named Head Of CME Program At WVU

Robert L. Smith, M. D., former regional administrator of the United Mine Workers of America Health and Retirement Funds, has joined the faculty of West Virginia University School of Medicine as Assistant Dean for Continuing Education and Associate Professor of Community Medicine.

Robert L. Smith, M. D.

His appointment allows N. LeRoy Lapp, M. D., Professor of Medicine (pulmonary diseases), to return to full-time patient care, teaching and research. Doctor Lapp, at the request of Dean John E. Jones, had directed the School's continuing education office since it was established in 1975 and supervised the rapid growth of its now fully-accredited programs.

In 1976, WVU School of Medicine was named an approved sponsor of continuing medical education programs by the American Medical Association's Council on Continuing Medical Education. In addition to short courses, symposia, teaching days and seminars on the Morgantown, Charleston and Wheeling campuses, the office coordinates more than 60 weekly conferences, visiting professor programs and other outreach activities in the State.

During his eight-year affiliation with the UMWA Funds in the Morgantown regional office, Doctor Smith has worked closely with West Virginia physicians and those from several other states including Pennsylvania, Maryland, Ohio and Michigan.

Previously, he was a commissioned officer for 24 years with the U. S. Public Health Service, retiring in 1969 as Assistant Surgeon General.

Doctor Smith was born in Keithsburg, Illinois. An alumnus of Bradley University, he received his medical degree from the University of Illinois in Chicago and a master's degree in public health and tropical medicine from Tulane University.

He served three years as Assistant Superintendent of Public Health for New Orleans with responsibility for tuberculosis and venereal disease control and for maternal and child health activities.

Among posts Doctor Smith held in the USPHS were Assistant Commissioner of Health, Territory of Alaska; Assistant Administrator for Health and Medical Affairs, Federal Civil Defense Administration; U. S. Representative on the NATO Medical Committee; Deputy Chief of the Division of Health Mobilization in the Office of Surgeon General; Regional Health Director and representative of the Surgeon General in the States of Arizona, Nevada, California, Oregon, Washington, Alaska, Hawaii, the Territories of Guam and American Samoa, and the Trust Territory of the Pacific Islands, and Chairman of the Comprehensive Health Planning and Development Advisory Committee to the Office of the Surgeon General.

Doctor Smith, who was certified by the American Board of Preventive Medicine in 1953, received the Pfizer Award of Merit from the U. S. Civil Defense Council in 1960, the USPHS Meritorious Service Medal in 1968, and the Department of Health, Education and Welfare's Superior Service Award in 1969.

Promotions Awarded To 46 of WVU School of Medicine Faculty

Of the 146 faculty promotions awarded at West Virginia University, effective July 1, 46 are to members of the School of Medicine faculty.

The recipients, and their new ranks, are:

Dominic A. Antico, Associate Professor, Radiology, granted tenure; Michael D. Avington, Clinical Associate Professor, Medicine; James B. Blair, Associate Professor, Biochemistry, granted tenure; Carole B. Boyd, Associate Professor, Pathology; Nancy K. L. Brallier, Clinical Assistant Professor, Behavioral Medicine and Psychiatry; Paul B. Brown, Associate Professor, Physiology and Biophysics.

Sandy Leroy Burkart, Associate Professor, Neurology, with tenure; Carl H. Cather, Clinical Associate Professor, Surgery; John T. Chambers, Clinical Professor, Obstetrics and Gynecology; Stuart T. Chen, Professor, Medicine; Thomas E. Chvasta, Clinical Associate Professor, Medicine; Brenda K. Colasanti, Associate Professor, Pharmacology and Surgery, granted tenure; Patrick J. Condry, Assistant Professor, Medicine.

Phyllis L. Flowers, Assistant Professor, Surgery; Marta J. Henderson, Associate Professor, Pathology, with tenure; George P. Hlusko, Associate Professor, Behavioral Medicine and Psychiatry; Michael T. Hogan, Associate Professor,

Radiology, granted tenure; S. N. Jagannathan, Associate Professor, Pathology; Abnash C. Jain, Professor, Medicine; Chi Meen Lee, Clinical Assistant Professor, Surgery; Ping Lee, Professor, Physiology and Biophysics.

Romeo Y. Lim, Clinical Associate Professor, Surgery; John C. Linton, Associate Professor, Behavioral Medicine and Psychiatry, with tenure; Paul F. Malone, Clinical Associate Professor, Surgery; Phillip B. Mathias, Clinical Associate Professor, Surgery; Donald E. McDowell, Clinical Professor, Surgery; David M. Nally, Assistant Professor, Surgery; William A. Neal, Associate Professor, Pediatrics, granted tenure; Stephen A. Olenchock, Assistant Professor (part-time), Microbiology.

Dennis O. Overman, Associate Professor, Anatomy, granted tenure; Paul James Parsons, Assistant Professor, Neurology; Alfred K. Pfister, Clinical Professor, Medicine; Arthur Lee Poffenbarger, Clinical Professor, Neurology; Michael A. Santer, Jr., Clinical Associate Professor, Medicine; Alan I. Segal, Assistant Professor, Surgery; James M. Stevenson, Associate Professor, Behavioral Medicine and Psychiatry, with tenure.

John W. Trenton, Clinical Professor, Surgery; Pedro R. Urquilla, Associate Professor, Pharmacology, granted tenure; Knox Van Dyke, Professor, Pharmacology; Nancy C. Wanderman, Associate Professor, Pediatrics, Charleston Division; Stafford G. Warren, Clinical Associate Professor, Medicine; Kenneth C. Weber, Professor (part-time), Physiology and Biophysics; Harry S. Weeks, Jr., Clinical Professor, Anesthesiology; David P. Westfall, Professor, Pharmacology; Kenneth L. Wible, Associate Professor, Pediatrics, granted tenure, and David J. Withersty, Associate Professor, Behavioral Medicine and Psychiatry, granted tenure.

Doctor Zeedick Named Heart Association President

Dr. John F. Zeedick of South Charleston was elected President of the American Heart Association, West Virginia Affiliate, during the group's annual meeting held in May in South Charleston.

Drs. Abnash C. Jain of Morgantown and William H. Carter of Charleston were elected President Elect and Vice President, respectively.

Physicians among 42 persons from around the State elected to the board of directors were (for one-year terms): Drs. Harold L. Jellinek, Elkins; Richard B. Knapp, Morgantown; Robert J. Marshall and Maurice A. Mufson, both of Huntington; William A. Neal, Morgantown, and Abdul R. Piracha, Bluefield.

Physicians elected to three-year terms on the board were Dr. Allen F. Bowyer, Doctor Jain, and Dr. Richard V. Lynch, Jr., all of Morgantown; Doctor Carter and Dr. Morris H. O'Dell of Charleston; Drs. Bernadette Page, Beckley; K. Venkata Raman, Huntington; Howard B. Sauder, Wheeling, and Doctor Zeedick of South Charleston.

The Association will hold its 1978 annual meeting in Morgantown.

New officers were elected during the annual meeting of the West Virginia Chapter of the American College of Surgeons held this spring at The Greenbrier in White Sulphur Springs. They are (front row), from left, Drs. Alvin L. Watne, Morgantown, Secretary-Treasurer; Alfred D. Ghaphery, Wheeling, President, and Robert J. Gardner, Morgantown, President Elect; second row, from left, Drs. Fernando G. Giustini, Wheeling, First Vice President; Walter H. Moran, Jr., Morgantown, Chairman, Trauma Committee; D. Verne McConnell, Counsilor, Wheeling, and William E. Lawton, Jr., Charleston, Counsilor; back row, William E. Gilmore, Parkersburg, Governor.

Governor's Conference On EMS In Charleston, July 14-15

The Governor's Conference on Emergency Medical Service will be held at the Daniel Boone Hotel in Charleston July 14-15. Governor Rockefeller will address the opening session of the conference at 1 P.M. on July 14.

Louis J. Donofrio, Regional EMS Program Director (Department of Health, Education and Welfare) will discuss the Federal EMS program and funding which is available.

Fred M. Cooley, M.D., Director of the West Virginia Office of Emergency Medical Services, will explain the State EMS program, and funds which are available for community development of emergency medical service systems.

Workshops on various types of local EMS system structures, EMS personnel training, EMS communications, and county-wide EMS system planning and funding will be held during the meeting.

More than 200 physicians, county officials, health care administrators and citizens are expected to attend the conference, which is open to the public.

Further details may be obtained from the West Virginia Office of Emergency Medical Services, 1300 Washington Street, Charleston (Telephone 304/348-3956).

Marshall University officials and members of the Owen Clinic Institute's board of directors recently finalized an agreement establishing the Thelma V. Owen Memorial Fund at Marshall. Interest from the $5,583.45 gift will be used by the Medical School to sponsor lectureships in neuropsychiatry. Signing the agreement were, seated from left, Dr. Robert W. Coon, Medical School Dean and Marshall Vice President for Health Sciences; William G. Powers, President of the Marshall Foundation, and Dr. M. G. Stemmerman, Owen Clinic Medical Director. Also present for the signing were Mrs. Shirley Smalley, President of the Institute's board of directors, and Dr. Ruth C. Harris, Chairman of the Medical School's Pediatrics Department.

Doctor Point Medical Director Of WVU Charleston Division

Dr. W. Warren Point, a native of Charleston, was named Professor and Director of Medicine, Charleston Division / West Virginia University Medical Center, in May.

Doctor Point returned to Charleston in his new post from Cambridge, Massachusetts, where he had served as Associate Director of the Department of Medicine of the Massachusetts Institute of Technology.

W. Warren Point, M. D.

Doctor Point was in the private practice of internal medicine and gastroenterology at Massachusetts General Hospital in Boston from 1951 to 1967, and then joined in group practice in those two specialties in the Medical Department of MIT.

He was graduated from Charleston High School and West Virginia University, receiving his M. D. degree in 1945 from Harvard Medical School.

Doctor Point was recertified in 1974 as a Diplomate of the American Board of Internal Medicine and is a Fellow of the American College of Physicians.

The new medical director is an Assistant Clinical Professor of Medicine at Harvard. He was an Associate Physician of Massachusetts General Hospital, Chairman of the hospital's Pharmacy Committee and a member of the hospital's Subcommittee on Human Studies of the Research Committee. At MIT, he was Chairman of the Committee on the Use of Humans as Experimental Subjects, Chairman of the Pharmacy Committee, and a member of the Executive Committee, Clinical Research Center.

Doctor Point also was a consultant in gastroenterology at Boston Children's Hospital Medical Center, and was a Visiting Physician at Mount Auburn Hospital.

His other professional memberships include Phi Beta Kappa, Alpha Omega Alpha, Boylston Medical Society, American Gastroenterological Association and the Northeast Medical Association.

Doctor Point served his medical internship and residency at Boston City Hospital, Harvard

Service, and was a clinical and research fellow in gastroenterology from 1949 to 1951 at Massachusetts General Hospital. He served with the U. S. Army Medical Corps from 1946 to 1948.

He is the author or co-author of a number of scientific articles, including some 20 Case Records of the Massachusetts General Hospital published in the New England Journal of Medicine from 1951 through 1970.

Doctor and Mrs. Point, the former Virginia Anne Parry of Belmont, Massachusetts, are the parents of three daughters.

Doctor Chambers Receives Highest WVU Award

Dr. John T. Chambers of Charleston was one of three persons to be presented The Order of Vandalia, West Virginia University's highest award for outstanding contributions to the University, during commencement exercises in Morgantown in May.

A gynecologist, Doctor Chambers was honored for his role in helping establish the Charleston Division of the WVU Medical Center, which WVU President James G. Harlow described as "one of the most significant events in the life of the University during the past decade."

Born in Charleston and reared in Huntington, Doctor Chambers received his bachelor's degree from WVU and his M. D. degree from Case Western Reserve University School of Medicine in Cleveland.

He currently is a member of the State Medical Association's Legislative and Insurance committees and the Association's Ad Hoc Committee on Professional Liability.

The other two recipients of The Order of Vandalia were William J. Maier, Jr., of Charleston and the late Julius W. Singleton of Morgantown.

Doctor Molina At Hoffman Clinic

The name of Dr. Rafael E. Molina was inadvertently omitted by *The Journal* in a news article appearing in the June issue (Page 138). Doctor Molina should have been included as one of the associates of Dr. Charles A. Hoffman at the Hoffman Urological Clinic in Huntington. *The Journal* regrets this oversight.

Medical Meetings

Aug. 11-13—ACS, Big Sky, Mont.

Aug. 20—Seminar in Obstet.-Gynecol., Wheeling.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 8-9—Hal Wanger Family Practice Conference, Morgantown.

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 15-16—Medical Society of the District of Columbia, Washington, D. C.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 16-17—Emergency Room Practice, Charleston.

Sept. 22-24—Second Annual Conference on Histological Techniques, Morgantown.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 23-24—ACP Regional Meeting, Morgantown.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 27-30—Am. Roentgen Ray Society, Boston.

Sept. 28-30—ASIM, Washington, D. C.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 17-21—ACS, Dallas.

Oct. 23-26—Indiana State Medical Assn., Indianapolis.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Nov. 6-9—Southern Medical Assn., Dallas.

1978

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

April 8-10—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

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Malignant Melanoma: Prognostic Factors And Therapeutic Results*

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The natural history of malignant melanoma is extremely variable. Prognostic factors such as the type of primary melanoma, level of invasion, location on the body, sex, and site of metastases determine ultimate survival. Comparison of the effectiveness of different therapeutic modalities cannot be achieved unless patients with similar prognostic factors have been studied.

MELANOMA is an uncommon tumor, but it is not rare. The incidence of malignant melanoma varies from 0.1 to 9 per 100,000 population per year in different countries.[1] The sex ratio is approximately equal with different series reporting slight male or female predominance.[2,3]

There is a reasonable correlation between the degree of exposure in sunlight and the incidence of melanoma.[4] The most common primary sites of melanoma in males are the trunk or head and neck, and in females the lower extremities.[1] This fact also supports a role for sun exposure in the etiology of disease. The density of melanocytes does not seem to determine the location of the primary melanoma. The head and neck region and the genitalia are two areas with the greatest density of melanocytes;[5] however, the incidence of melanoma is far greater in the head and neck.

Pathology

Malignant melanoma occurs in three distinct clinicopathologic forms as illustrated in Table 1.[6] Lentigo maligna melanoma is a slowly evolving, tan, freckle-like lesion, one to two centimeters in diameter occurring on exposed cutaneous surfaces in elderly people. The premalignant phase, lentigo maligna, may exist for many years before invasion develops. The bizarre pleomorphic malignant melanocytes scattered among normal cells in the basal layer characterize the lesion.

Superficial spreading melanoma is usually a large lesion two to three centimeters in diameter occurring anywhere on the body in middle-age persons. The margins of the lesion are often ele-

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TABLE 1
Clinicopathologic Forms of Malignant Melanoma

Form of melanoma	*Location*	*Median Age*	*Sex predilection*	*Duration*	*Histologic characteristics in noninvasive areas*
Lentigo maligna	Exposed surfaces	70	None	5-15 yrs.	Pleomorphic normal and bizarre melanocytes in basal regions
Superficial spreading	All surfaces	56	Lower legs in women	1-5 yrs.	Intraepidermal monomorphous malignant melanocytes
Nodular	All surfaces	49	None	Months-2 yrs.	Intraepidermal and dermal invasion occur simultaneously

vated and combinations of colors such as tan, brown, black, or rose characterize the lesion. Although it may evolve slowly, the time course of the disease is less indolent than lentigo maligna melanoma.

Nodular melanoma is the most aggressive lesion, progressing over months to years in some cases and occurring as spherical berry-like nodules on most body surfaces. Pathologically, no isolated intraepidermal phase occurs without dermal invasion.

Superficial spreading and nodular melanomas are by far the most common types of tumor seen by physicians (Figure 1).

Level of Invasion and Staging

In 1969, Clark *et al* studied the relationship of survival data to depth of invasion of primary malignant melanoma.[7] They defined five levels of invasion as shown in Table 2. McGovern has also confirmed that the length of invasion is an important prognostic indicator in patients with melanomas.[8] Table 3 correlates five-year survival rates with the level of invasion and histologic type. Survival varies from 85 per cent for level II to 23 per cent for level V. Breslow has recently suggested that the actual measurement of tumor thickness may be a better determinant of prognosis than the level of invasion.[9] The greater virulence of nodular melanoma compared to superficial spreading melanoma for a given level of invasion probably reflects the greater likelihood of nodal involvement.

Several staging classifications are in use for malignant melanoma, often adding further confusion to the interpretation of data. A simple, commonly used example of a staging classification is shown in Table 4.

There is little convincing evidence that nodal resection by itself influences the prognosis of patients with or without nodal involvement. As in breast cancer, knowledge of the status of the draining lymph nodes gives the physician a powerful indication of the prognosis and influences his selection of treatment. Involvement of lymph nodes markedly reduces the likelihood of survival at 5 and 10 years (Figure 1). Patients with palpable nodes involved by tumor have a worse prognosis (10-19 per cent five-year survival) than patients with nodes involved only microscopically (30-53 per cent five-year sur-

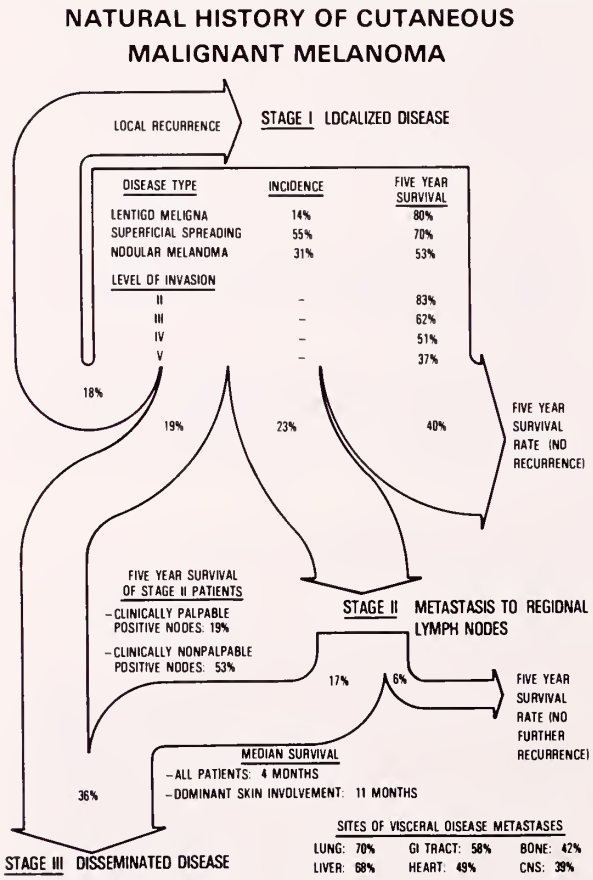

Figure 1. Natural history of cutaneous malignant melanoma.

TABLE 2

Level of Invasion in Malignant Melanoma

Level	*Description*
I	All tumor cells above basement membrane
II	Invasion into loose connective tissue of papillary dermis
III	Tumor cells at junction of papillary and reticular dermis
IV	Invasion into reticular dermis
V	Invasion into subcutaneous fat

TABLE 3

Correlation of Level of Invasion and Histologic Type in Malignant Melanoma [from McGovern[8]]

	% 5-Yr. Survival	
Level	*Superficial spreading*	*Nodular*
II	81	85
III	65	39
IV	56	45
V	50	23

TABLE 4

Clinicopathologic Staging of Malignant Melanoma

Stage	*Disease Site*
I	Localized primary melanoma
IA	Local recurrences
II	Metastases to regional lymph nodes
III	Disseminated melanoma

vival).[10,11] This fact should always be strongly considered in surgical adjuvant studies.

Prime candidates for adjuvant chemoimmunotherapy trials are patients with stage II disease, regardless of level of invasion, and patients with level IV or V involvement, regardless of nodal status. Until recently, little data were available correlating level of invasion with nodal involvement and the survival of patients with various levels of invasion with and without positive nodes. Recently, Wanebo *et al*[12] have made these correlations. In patients with clinical stage I disease (nonpalpable lymph nodes) with lesions confined to the extremities, the incidence of nodal involvement at lymphadenectomy increased progressively with level of invasion and five-year survival decreased commensurately (Table 5). Table 6 demonstrates that the overriding influence on survival for patients with a given level of invasion of an extremity melanoma is the status of the regional lymph nodes determined at an elective lymphadenectomy. There is little difference in survival among patients with level II, III, or IV invasion in the absence of identifiable tumor in the draining lymph nodes. Thus, the level of invasion is important and should be determined in all patients since it does predict for lymph node involvement. It also may identify patients in level V or patients with blood vessel invasion, both of whom may have a high risk of recurrence even in the absence of lymph node invasion. However, knowledge of the status of lymph nodes themselves appears to be the most important piece of information necessary for the design of the clinical trial. Further data of this type are necessary to corroborate the relative importance of level of invasion in predicting stage of disease.

TABLE 5

Clinical Stage I Patients with Lesions on the Extremities: Relationship of Level of Invasion to Incidence of Nodal Involvement [from Wanebo et al[12]]

Level of invasion	*No. of patients*	*Per cent with positive nodes*	*5-yr. survival (%)*
II	28	4	100
III	62	7	88
IV	69	29	66
V	10	70	15
	169		

General Factors Influencing Prognosis

Although the level of invasion and stage of tumor are clearly the most important information influencing selection of treatment and ultimate prognosis, they should not be used to design or interpret clinical trials in the absence of the other factors which can influence the outcome of a study.

The most important of these influences are sex and primary site in patients with resectable tumors, and sex and dominant site of involvement in patients with metastases.[3,10,13] The prognosis in women, stage by stage, treatment by treatment, is consistently better than in men. Thus, some form of endocrine control over this tumor has been postulated and hormonal manipulation attempted.[2] Fisher *et al* have demonstrated that 46 per cent of patients with malignant melanoma had cytoplasmic estrogen receptors.[14] Estrogen receptor activity was detected in the primary lesions, lymph node metastases, skin metastases, and visceral metastases of both male and female melanoma patients.

Distal extremity lesions have a better prognosis than those of the trunk and head and neck.[15] The data suggest that the time to appearance of metastases in distal extremity lesions is longer than that for the head and neck region.[2] In the former, metastases appear in an average of two years while in the latter the median time for the appearance of metastases is one year. Therefore, not only do women have a superior prognosis when considering identical primary sites, but they are more likely to have distal extremity lesions which have a better prognosis

TABLE 6

Disease-Free Survival in 133 Patients with Extremity Melanomas, Clinical Stage I, Correlated with Level of Invasion and Nodal Involvement [from Wanebo et al[12]]

Level	*Total patients*	*Patient with positive nodes*	*5-yr. survival (%)*	*Patients with negative nodes*	*5-yr. survival (%)*
II	19	1	100	18	100
III	46	2	100	44	91
IV	44	11	27	33	82
V	4	3	0	1	0
	113	17		96	

regardless of sex. The influence on the interpretation of data of an unbalanced randomization by sex alone is readily apparent.

These points are most important in adjuvant studies in patients with localized disease. Early interpretation of data may lead to the false impression of a favorable influence on the time to tumor recurrence when the outcome is more related to the sex distribution and site of involvement of the population in question.

In patients with metastatic tumor, visceral dominant disease carries a worse prognosis than skin dominant lesions (Figure 1). In the latter instance visceral metastases eventually develop and are the cause of death. Again, sex influences drug response. Women and patients with soft tissue disease are more likely to respond to drug therapy (and very likely immunotherapy) than those with most visceral metastases.[13]

For many years chemotherapists have been plagued by the observation that the first one or two patients with metastatic melanoma treated with a new drug often responded. Thereafter, few additional responses were noted in the remainder of the study. This observation is probably related to the superior prognosis and greater likelihood of response of patients with skin dominant lesions who are more often available in clinics when new drug or immunotherapy trials are initiated.

A few other points about sites of metastases are worthy of note. Melanoma is one of the few tumors which consistently metastasizes to the spleen and may occasionally cause unexplained splenomegaly.[2] The heart, another uncommon site of metastases for most tumors originating outside the chest, is also frequently involved by malignant melanoma cells and significant clinical arrhythmias may occur and influence the outcome of the patient's course. Malignant melanoma is one of the most common metastatic malignant tumors leading to unexplained small bowel obstruction from metastases to the small bowel mucosa. Intestinal obstruction also frequently complicates the course of patients undergoing systemic treatment for metastatic disease.

Other sites of metastases are illustrated in Figure 1. By far the most important is involvement of the central nervous system. Autopsy series demonstrate central nervous system involvement in 35[2] to 54[13] per cent of patients. Although involvement of the brain is occasionally localized and will occasionally respond to surgical resection alone, most patients have multiple solid metastases. Even minor neurologic symptoms in patients known to have malignant melanoma should be considered significant since they often presage development of overt central nervous system involvement. In general, as with most tumors, those patients with central nervous system metastases do poorly with systemic treatment alone.

The phenomenon of spontaneous regression of melanoma has been the subject of several reports. In a compilation of cases of spontaneous regression of cancer by Everson and Cole,[16] melanoma was one of the most common tumors reported. Considering the low incidence of the disease, these data suggest some unique characteristic of malignant melanoma, perhaps immunologic, which makes patients with metastatic tumor more susceptible to spontaneous regression. Although the frequency of spontaneous regression varies, it is not likely to be in excess of one per cent. We have observed only one possible spontaneous regression of tumor in over 150 patients with metastatic malignant melanoma treated in the Medicine Branch, DCT, NCI.

Treatment

Adequate surgical resection of localized malignant melanoma is the only treatment modality that has been shown to be capable of curing patients with this disease. Yet Figure 1 illustrates that only 40 per cent of Stage I patients and 25 per cent of Stage II patients treated survive five years without evidence of recurrent disease. Local control of the primary lesion can only be achieved by wide surgical excision. The area of excision should extend at least four centimeters in all directions from the lesion and closure of the wound should be managed by placement of a split-thickness skin graft.[17] Patients with clinically positive lymph nodes (Stage II) who lack evidence of distant metastases should undergo regional lymph node dissection. Surgery in these cases documents tumor involvement of the regional nodes and provides local control of the disease. The question of whether to dissect the regional nodes in clinically Stage I patients remains controversial. Although the therapeutic effectiveness of such surgery has not been documented,[17] knowledge of the status of the nodes is important in determining the prognosis of the patient (see Level of Invasion and Staging). Surgical treatment of patients with Stage III disseminated disease is usually not indicated.

Patients with disseminated disease are usually treated with chemotherapy. Only imidazole carboxamide (DTIC) and the nitrosoureas appear to be active agents against malignant melanoma. Twenty to 25 per cent of patients treated with

either agent have an objective response.[18] Median survival is prolonged by approximately six months in the responding patients. Unfortunately, patients who fail to respond to either agent do not respond when subsequently treated with the other drugs.[19] Combinations of DTIC, nitrosoureas, and many other chemotherapeutic agents have not significantly improved the response rate above that attained with single agents.[20] Many small non-randomized trials that report higher response rates have frequently been composed of patients with more favorable prognostic factors, i.e., females with metastatic disease restricted to skin or lymph nodes.

There has been significant interest in treatment with immunotherapy since tumor-associated antigens were demonstrated on human malignant melanomas.[21] Most workers have attempted non-specific immune stimulation with Bacillus Calmette-Guerin (BCG). Direct injection of BCG into *intradermal* melanoma metastases has resulted in regression of 58 per cent of the injected nodules as well as 14 per cent of nearby uninjected nodules. [22] The use of BCG as an adjuvant therapy following surgical treatment of Stage II melanoma remains more controversial. Non-randomized studies from Morton *et al* suggest that weekly BCG may double the percentage of patients who are disease-free at two years.[23] However, the preliminary reports on a randomized trial by Pinsky *et al* showed no advantage to Stage II patients receiving adjuvant BCG over those treated with surgery alone.[24] BCG has also been combined with DTIC for the treatment of disseminated malignant melanoma. Gutterman *et al* have reported a 55 per cent objective response rate for patients with lymph node and for subcutaneous metastases compared to 18 per cent in a similar historical control group.[25] Median duration of remission and survival did not differ between the two groups. Currie and McElwain likewise have reported 17 objective responses in 30 patients treated with DTIC and BCG.[26] Larger randomized trials comparing patients treated with DTIC or DTIC-BCG are currently in progress.

Conclusion

Like most tumors, malignant melanomas are occasionally localized and cured by resection of the primary lesion alone. The actual impact of treatment modalities on survival, including the extent of resection of primary lesion, lymphadenectomy, local limb perfusion, adjuvant chemotherapy and/or immunotherapy, or chemotherapy for advanced metastatic disease, is clouded by a failure to appreciate or acknowledge the variables known to influence the prognosis of a patient with malignant melanoma. Unlike most tumors originating in a geographically confined single organ system, the initial behavior of malignant melanoma is as variable as the location of the primary site.

The flow of a typical population of patients with clinical Stage I malignant melanoma taken from grouped large series of patients in the literature is illustrated diagrammatically in Figure 1. Also shown are the incidence and survival by histologic type and level of invasion.

Of all patients with Stage I melanoma who undergo primary resection with or without lymphadenectomy, about 40 per cent will survive five years free of recurrence. This figure will obviously vary from series to series depending on the mix of patients with the variables mentioned above. Twenty-three per cent of clinical Stage I patients may have lymph node invasion at the time of diagnosis of the primary (determined by lymphadenectomy) or may develop nodal metastases later. One quarter of these patients (six per cent of the total population in Figure 1) will be alive and free of disease at five years while three quarters (17 per cent of the total population in Figure 1) will develop evidence of dissemination. Nineteen per cent of patients with localized disease will develop subsequent evidence of systemic disease (Stage III) without ever presenting as Stage II disease. The remaining 18 per cent of resected patients will develop evidence of local recurrence and can be recycled through the diagram. Essentially, all Stage III patients will die of their disease.

The data in Figure I illustrate the points made earlier: the disease is curable if localized; the level of invasion predicts nodal metastases and survival; and nodal invasion is the most important influence on the likelihood of dissemination. However, it must be remembered that in many series complete data on all the prognostic variables were not available and often the influence of sex, age, and site of involvement was not taken into account.

In the future, investigators must recognize that a great amount of information on the natural history of malignant melanoma is available. Therapeutic trials can only be meaningful if patients with similar prognoses are studied in a prospective randomized manner.

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Hemorrhagic Diathesis And Surgery

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Proper diagnosis is the key to success in the surgical care of patients with hemorrhagic diathesis, since a regimen that is highly effective in treating one type of disorder may be totally worthless in treating another. This paper will outline a simplified diagnostic approach, pre- and postoperative management of the main forms of hemorrhagic diathesis which are encountered in surgery, and some case reports from Memorial Division of Charleston Area Medical Center (CAMC).

THE diagnostic clinical approach should include analysis of the history (family history, drugs, associated diseases, etc.), physical examination (jaundice, types of rash like petichae or ecchymosis, enlarged lymph nodes, splenomegaly) and laboratory investigations.

Laboratory Investigations

There are many tests which could be done to differentiate the various forms of hemorrhagic diathesis. Some of these are not reliable, like the clotting time, and other tests are very sophisticated or time-consuming. The following four tests are simple, rapid and accurate to rule out not less than 95 per cent of the hemorrhagic diathesis: bleeding time (BT), platelet count (PC), prothrombin time (PT), and activated partial thromboplastin test (APTT).

Alterations of the extrinsinc pathway of coagulation will affect the prothrombin time, i.e., deficiency of one of the factors of that system will prolong the PT. Alterations of the intrinsic pathway of coagulation will affect the PTT or APTT, i.e., deficiency of one or more of the following factors will prolong the APTT: Factors XII, XI, IX, VIII. Alterations of the common pathway factors (X, V, II, I) will prolong both PT and APTT (Table 1). Accordingly, the scheme shown in Table 2 is a simplified presumptive diagnosis of the common bleeding disorders.

The most common forms of hemorrhagic diathesis which might be encountered in surgery are: (1) thrombocytopenia, mainly the idiopathic (ITP) and thrombocytopenia secondary to hypersplenism; (2) the classic hemophilia (A), rarely hemophilia B (Christmas disease); (3) hypoprothrombinemia secondary to liver diseases, vitamin K deficiency, drugs mainly coumadin; and (4) to a lesser extent hypofibrogenemia, and disseminated intravascular coagulopathy. If more detailed differentiation is needed, see Table 3.

Outlines of treatment of the most common form of hemorrhagic diathesis with emphasis on preoperative and postoperative management:

In review of the Memorial Division records of Charleston Area Medical Center (CAMC) in five years, 1969 to 1973, the number of cases found

TABLE 1
Systems of Coagulation

Extrinsic pathways	*Intrinsic pathways*
Tissue Thromboplastin factor III	Active factor XII (contact activation)
factor VII	↓ activates
factor IV	factor XI
↓	↓
	factor IX
	↓
	factor VIII
factor X ←	
↓ Activates	
factor V	
↓	
factor II Prothrombin	
↓	
factor I Fibrinogen → loose fibrin, factor XIII → tight fibrin	

common pathway

is shown in Table 4. Some of these were surgical cases, as we are going to mention in our outline of treatment.

Hemophilia A (classic): The following facts should be known about factor VIII for proper treatment. This factor is unstable: the normal level of factor VIII in the plasma varies from 50-200 per cent. The whole blood clotting time is worthless as a preoperative screening test since it is normal in hemophiliac patients whose factor VIII level is only three to five per cent of normal, a level grossly inadequate for surgical hemostasis.[1,2] The hemostatic level needed depends on the clinical situation. For example, five per cent is enough to prevent spontaneous bleeding, control of bleeding into a confined space, e.g., hemarthrosis may be achieved at 15-20 per cent, but major surgery probably requires a level to be maintained above 30 per cent during surgery and for at least 10 days or until the removal of the stitches.[3,4,5] The half-life of factor VIII *in vivo* is around 12 hours, so booster doses should be given every 12 hours.

Available products include (1) *Cryoprecipitate*: Each one pack/10 kg. = 20 per cent level. Each pack also contains 50-200 units of factor VIII; the average is 110; (2) *Antihemophilic factor concentrates, e.g., hemophile:* each unit of factor VIII activity/kg. B. W. raises factor VIII level by two per cent in absence of inhibitors; and (3) *Plasma*: should be frozen if used for replacement of factor VIII. The prescribed dose of plasma is 15 ml./kg. body weight, then 10 ml./kg. every 12 hours, but the plasma level of factor VIII does not usually exceed 10-20 per cent with the plasma therapy. This level might be effective to control enclosed soft tissue bleedings, but to to control open surface bleeding, plasma is usually ineffective. If anemia is present, this should be corrected by packed RBC.

Acute abdomen in hemophiliacs: The important hemorrhagic causes of abdominal pain in hemophiliacs are retroperitoneal bleeding,[6] mesenteric hematoma, with or without volvulus or gangrene of the corresponding portion of the intestine; renal colic from pelvicureteric clots; and hematoma of the intestinal wall with partial or complete obstruction. Most of these conditions respond rapidly to transfusion therapy alone and with a short period of observation. However, bleeding into the intestinal wall or mesentery may lead to intussusception or infarction of the affected segment of the intestine and surgical intervention may be required in rare instances.[7] In surgery, tubes, packs, and drains in granulating wounds should be avoided. All these are potential sources of bleeding.[8,9] Electrocautery to control hemorrhage should not be used in hemophiliacs or patients with bleeding tendency for fear of bleeding after the cauterized eschar sloughs.[10] The use of split thickness skingraft

TABLE 2

Simplified Presumptive Diagnosis of the Common Bleeding Disorders

Test	*BT*	*PC*	*PT*	*APTT*	*Presumptive DX*	*Hereditary*	*Acquired*
1	inc	dec	N	N	Thrombocytopenia	Aldrich syndrome and other rare forms	ITP, drugs and other secondary forms
2	inc	N	N	N	Abnormal platelet quality	Thromboasthenia and thrombopathy	Drugs (e.g. aspirin dysproteinemia, etc.
3	N	N	inc	N	Abnormal extrinsic pathway of coag.	deficiency factor VII	deficiency factor VII
4	N	N	N	inc	Abnormal intrinsic pathway of coag.	deficiency factor VIII, IX, XI and XII	inhibitors to these factors
5	N	N	inc	inc	Abnormal common pathway of coag.	deficiency of factor I, II, V, X	liver diseases, vit K. deficiency, DIC, fibrinolysis
6	inc	N	N	inc	VonWillebrand's disease		
7	inc	dec	inc	inc	DIC		

inc.—increase
N.—normal
dec.—decrease
DIC—disseminated intravascular coagulopathy

TABLE 3
More Detailed Diagnostic Approach

Do - - - Bleeding time, pro-time, activated PTT
If prolonged bleeding time
- - - - - - - - - - do platelet count

Normal
a. vascular
Pupura
b. abnormal quality

increase platelet
(thrombocythemia)

decrease platelet
(thrombocytopenia)
- - - - - do
bone marrow biopsy
a. increase megakerocytes (hypersplenism or immune)
b. decrease megakerocytes (myelogenic purpura)

IF— Pro-T. / Activated PTT
a. prolonged PT and normal activated PTT → factor VII deficiency
b. prolonged activated PTT and normal PT → intrinsic system factors deficiency (VIII, IX, XI, XII) - - - - - do the substitutional method of intrinsic pathway test or serum factors assay or rarely the TGT
c. prolonged both PT and activated PTT → common pathway factors deficiency (I, II, V, X)
do - - - - - serum fibrinogen - - - - - if low - - - - - → hypofibrinogenemia, if normal → do the following tests: add normal serum to the patient's serum and repeat the PT and activated PTT - - - - - normal PT and activated PTT means factor X deficiency (this factor is present in normal serum), if the PT and activated PTT are still prolonged this means factor V deficiency (this factor is not present in the serum)

has been advocated to cover open wounds in hemophiliacs.

Case Report One

S. C., a five-year-old male caucasian, was admitted to Memorial Division, CAMC, on January 18, 1973, after he was hit by a car and sustained lacerations of the left supra-orbital region, of the chin, and left nasal floor. That patient was a well-known hemophiliac (A). After suturing these lacerations in the emergency room, he was admitted for observation. On and off, the nasal area would bleed and some oozing would develop on the left posterior scalp and left supra-orbital area. He was taken then to surgery for evacuation of the hematoma of the left temporal area and supra-orbital area, and also the laceration of the left nostril was resutured, placing gelfoam. The postoperative course was uneventful. On February 5, 1973, further evacuation of the hematoma on the posterior scalp was done and the skin grafting was applied because of loss of full thickness of the scalp. The postoperative course was uneventful and the swelling subsided.

TABLE 4
Memorial Division
Cases of Hemorrhagic Diathesis at CAMC in 5 Years

	1969	1970	1971	1972	1973	Total
Classic hemophilia	7	8	6	5	9	35
Christmas disease	0	0	1	1	1	3
Idiopathic thrombocytopenic purpura	19	12	15	14	8	68
Hypoprothrombinemia, and hypofibrinogenemia (and DIC)	1	6	5	12	8	32
Neonatorum-hypoprothrombinemia	3	1	1	0	1	6
Vascular purpura	0	0	0	0	0	0
Anticoagulant overdosage	20	17	12	16	17	82
Thrombocytopathy	1	0	0	0	0	1
Total						227

From Table 4 we can notice that the most common forms were the Classic Hemophilia, Idiopathic thrombocytopenic purpura, hypoprothrombinemia and hypofibrogenemia, including the DIC and the anticoagulant overdosage.

Hemarthrosis: In addition to the replacement of factor VIII, immobilization of the joints for a few days in plaster is often helpful.[11]

Case Report Two

E. E., a 21-year-old male caucasian, was admitted to Memorial Division, CAMC, on January 16, 1973, because of pain in his right hip. He gave a history of bleeding tendency. In his bleeding studies, factor VIII was less than one per cent with very prolonged PTT. Hemarthrosis secondary to hemophilia (A) was his diagnosis. He was treated with hemophile and was started on prednisone 80 mg. a day. The pain cleared and he was made ambulatory on crutches, dis-

charged and instructed to remain on crutches for another week.

Spontaneous Hematuria: A replacement therapy is not indicated, particularly in low doses, and may even be harmful since the blood being shed while the patient is on replacement therapy may clot more easily and cause urinary obstruction. Prednisone 2 mg./kg. daily for three days has proved effective. If this does not stop after prednisone, a high dose of replacement therapy for one or two days is necessary, achieving ahead of 50 per cent normal level of factor VIII. Epsilon Amino Caproic EACA should not be used in hematuria since it may retard the dissolution of clots in the urinary tract and cause dangerous obstruction.

Hemophilia (B) (Christmas Disease): The hemostatic level of factor IX is almost like factor VIII or a little bit less, but the half-life of factor IX is longer (10-80 hours), so booster doses every day will be quite enough. This factor is also stable so the plasma need not be fresh. One unit of factor IX activity/kg. raises factor IX level by 0.5-1 per cent.

Case Report Three

B. O., a one-year-old male caucasian, was admitted to Memorial Division on February 15, 1974, because of bruising of the distal phalanx of the right middle finger following finger stick for CBC: this rapidly changed to gangrene within two days. There was a history of bleeding disorders in the mother's family and male siblings. The platelet count and the protime were normal, but the PTT showed few fibrin particles after five minutes and 30 seconds. The TGT (thromboplastin generation test) showed hemophilia (B). The patient underwent amputation of the distal phalanx of the right middle finger. The patient also developed severe anemia and went into shock following the femoral stick for the blood workup: that was corrected by plasma as well as blood transfusion to correct the anemia. The postoperative course was uneventful.

VonWillebrand's Disease (pseudo-hemophilia, vascular hemophilia): In this disease we have a deficiency of factor VIII, but not less than one per cent of the normal, capillary fragility, and decrease in platelet adhesiveness to glass surfaces. It is said that the deficiency of factor VIII is because of lack of the precursor factor necessary for synthesis of that factor which is present in plasma or serum of normal or even hemophiliac patients. For this reason, these patients might be given plasma fresh, fresh frozen, or even plasma concentrate like cryoprecipitate. This will also correct the platelet factor. The dose of plasma needed is 10 ml./kg./day. This has to be started two days prior to surgery. The maintenance dose is 5 ml./kg. every one to two days postoperatively.

Differential points from hemophilia (A) in this disease are prolonged bleeding time, decrease in platelet adhesiveness to glass surfaces (both of these are normal in hemophilia (A)), by immunological assays of factor VIII antigen and by the Quick's aspirin tolerance test. This test is based mainly on the fact that following ingestion of 20 grains of aspirin, the bleeding time will remain normal or slightly prolonged in normal patients or even hemophiliacs. But it will be significantly and constantly prolonged in patients with platelet dysfunctions like VonWillebrand's disease.[12,13]

Hypoprothrombinemias: This includes deficiency of factor II (true hypoprothrombinemia), factor VII and factor X, and usually combined deficiency. These factors with factor IX are called prothrombin complex, since all are vitamin K-dependent for their synthesis in the liver. These factors are stable so they can be treated with even outdated plasma. The dose of the plasma is 15 ml./kg. in the preoperative day and the same dose just prior to surgery, then maintained by 10 ml./kg. daily for five days postoperatively.

Acquired Hypoprothrombinemia: This could be caused by liver diseases, malabsorption of vitamin K or oral anticoagulants. Vitamin K is effective therapy when biliary tract obstruction or intestinal malabsorption has created a deficiency of this fat-soluble vitamin which is essential for the synthesis of the clotting factors II, VII, IX, and X. It is also useful to reverse the effects of oral anticoagulants (coumadin).

Case Report Four

B. M., a 46-year-old female caucasian, was admitted to Memorial Division with chronic lymphatic leukemia since 1970. She developed hemolytic anemia secondary to hypersplenism. She was receiving multiple blood transfusions for one year every three to four weeks. The patient was also on prednisone without any response. On examination, she appeared pale, weak, and had cushinoid features due to prednisone with several ecchymotic patches. Lab data showed Hb. 6.2, Hct. 18, WBC 9,300 with 94 lymphocytes, platelets count 30,000, very prolonged protime and PTT. Bone marrow biopsy showed chronic lymphocytic leukemia. This patient underwent a splenectomy because of the frequency of blood transfusions and the lack of control with predni-

sone. She was given three units of fresh blood before surgery which increased her HB. to 11.1 and Hct. to 32 and platelets to 104,000 just before surgery. One unit of fresh blood was also given during surgery and another one after surgery. The postoperative course was eventful.

Hypofibrogenemia, Afibrogenemia, Dysfibrogenemia and Disseminated Intravascular Coagulopathy: From clinical experience, the critical level of fibrinogen necessary for hemostasis appears to be about 100 per cent. Congenital hypofibrogenemia or dysfibrogenemia is very rare. *Acquired Hypofibrogenemia and DIC* is increasingly accepted as the common denominator of a number of acquired bleeding syndromes.[14,15] It was first recognized in the dramatic form in which it appears in certain obstetrical syndromes such as premature separation of the placenta. Intravascular coagulation is now acknowledged to occur with circulatory statis from cardiac standstill or severe shock with liberation of thromboplastic materials into the circulation with septicemia due to gram-negative endotoxin-producing bacteria, with violent antigen-antibody reactions, etc. Although transfusion therapy can replace the platelets and the clotting factors consumed by intravascular coagulation, this is most effectively accomplished after the clotting has been interrupted by removal of the cause or administration of heparin. Fibrinolysis is almost always a secondary response to intravascular coagulation and rarely requires specific antagonists. Primary fibronolysis is very rare.[16] EACA can be used in treatment of primary fibrinolysis, but not heparin. Heparin, as mentioned before, might be used in DIC since heparin will effectively block further activation of the clotting system and thus prevent further DIC at the first step of the chain reaction.[17] However, the use of heparin is not without danger, particularly when it is associated with vascular damage such as acute leukemia.

Case Report Five

B. J., a 3-month-old caucasian infant, was admitted to Memorial Division on August 29, 1973, for study and treatment. The onset started on August 26, 1973, by irritability and anorexia. On physical examination the anterior fontanel was full and tense, otherwise essentially negative. Lab data at the time of admission were in normal limits. Petichae were noted following the LP, but these were felt to be due to pressure changes in holding the child for LP. On September 2, 1973, the eyes and face started to deviate to the right and the muscle tone became poor; lastly, the possibility of brain tumor was raised and ventriculogram was done which showed large midline tumor with ventricular obstruction. On September 10, 1973, the patient was taken to surgery and craniotomy was done and a tumor removed. The pathology revealed it to be teratoma. The patient's religious beliefs (Jehovah's Witness) didn't allow the use of blood. However, the patient developed the evidence of DIC, which was noted when the site of venous puncture continued to ooze more than two hours. This occurred just prior to surgery. His protime was over 350, control 12, coag time over one hour, fibrinogen 80 mg. per cent, PTT 12 minutes, etc. Heparin therapy was withheld because of the surgical procedure. The hemoglobin was noted to drop five gm. after surgery. The baby's condition was explained to the family and, lastly, fresh blood was given. Factor VIII concentrate and fibrinogen were also given before the blood, being ready for type and cross match, but the baby arrested and expired after resuscitation measures failed in the same night of surgery.

Thrombocytopenia: The main forms encountered in surgery are the idiopathic thrombocytopenic purpura ITP and thrombocytopenia secondary to hypersplenism. Platelet transfusions are used only under special circumstances. The life span of transfused platelets is usually very short in patients with ITP.[26,27,28] Platelet transfusions are indicated in ITP only as emergency therapy for life-threatening hemorrhage, i.e., intracranial, massive GI or uterine bleeding, and before certain types of surgery. Transfusions are not required prior to splenectomy in the absence of hypovolemia and anemia. Preoperative platelet transfusion may be required if other types of surgery are unavoidable. Platelet-rich plasma or platelet concentrates are administered when platelet transfusions are required in patients who are normovolemic and not anemic. Ideally, a 70-kg. adult should receive four to eight units of platelet-rich plasma and about twice this amount of platelet concentrates. Fresh blood should be used whenever transfusions of whole blood are required in patients with ITP.[19]

Splenectomy is rarely indicated in patients with acute ITP (less than six months' duration). Emergency splenectomy should be considered only when severe, life-threatening hemorrhage fails to respond promptly to large doses of corticosteroids and/or platelet transfusions. In chronic ITP, splenectomy is indicated if excessive doses of corticosteroid are required to maintain complete or partial remission; if significant side effects are produced by the required dose of

cortisone; if there are no effects from corticosteroids, or if corticosteroids are contraindicated. Remissions after splenectomy probably occur in 60 per cent of cases, but relapses are not uncommon, and patients who have had thrombocytopenia for long periods, i.e., more than one year prior to splenectomy, appear less likely to respond.[20]

Case Report Six

C. C., an 8-year-old girl, was admitted to Memorial Division on April 21, 1974, with the diagnosis of ITP which had been treated conservatively with prednisone without much response. On examination, she was essentially normal except for purpuric spots; the spleen was not palpable; platelet count was 55,000; and PTT and PT were normal. This patient underwent splenectomy on April 22, 1974. No blood or platelets were given before or during surgery. Postoperatively, she did well. The platelet count went up to 80,000 the next day and to 264,000 on the third day and 500,000 before discharge. There was no operative or postoperative bleeding or complications.

Thrombocytopenia secondary to hypersplenism: If the thrombocytopenia and bleeding are mild, no specific treatment is required; but if the thrombocytopenia is severe, splenectomy and the treatment of the cause is usually followed by remission. Corticosteroids and platelet transfusions may be helpful during periods of severe hemorrhage (see Case Report Four).

Summary

Four simple tests could be done to rule out almost 95 per cent of hemorrhagic diathesis. These are protime, activated PTT, platelet count and bleeding time. The most common forms which might be encountered in surgery are hemophilias, mainly the classic type and rarely Christmas disease; thrombocytopenia, mainly ITP and secondary to hypersplenism; hypoprothrombinemia due to liver diseases; vitamin K deficiency; excess coumadin; and lastly and to a less extent, hypofibrogenemia and DIC. If the diagnosis was made, factors concentrates are preferred unless the patient is anemic and needs blood. If there is doubt about the diagnosis, fresh frozen plasma will roughly cover all the factors of coagulation, but might not raise the level to the hemostatic level which is required in certain surgeries. If platelet deficiency is expected, platelet concentrates can be given.

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Subcutaneous Mastectomy With Immediate Replacement By A Silastic Implant

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Fifty-four cases of subcutaneous mastectomies with immediate silastic implants for severe fibrocystic disease of the breast are presented. In spite of some complications, the final results in well selected patients are very encouraging. The surgery is a satisfactory alternative for a disabling and dangerous benign disease of the breast, but certainly not the final, definitive answer.

FIBROCYSTIC disease of the breast, of a severe degree, is a true and frequent disability in a woman's life.

The problem is perplexing to the physician and distressing to the patient. The abnormal breast contains potentially dangerous tissue as demonstrated by Copeland and others[1,2,10] and is extremely disabling to the patient.

Simple mastectomy used to be the treatment of choice to solve this complex problem, but it was a disfiguring procedure. Women resisted accepting it and surgeons were reluctant to perform it.

Since the introduction of subcutaneous mastectomy by Freeman in 1962,[1] and the silastic gel prosthesis* by Cronin in 1963,[3] an alternate procedure, subcutaneous mastectomy with silastic implant, immediate or delayed, offers a good psychological and anatomical alternative.

This procedure permits removal of the abnormal breast and restoration of the normal anatomy.

Clinical Material

Fifty-four cases have been studied since 1969 with a follow-up varying from six months to seven years (see Table).

The indications for subcutaneous mastectomy were based on a combination of the following criteria: severe benign cystic disease of the breasts, unremitting mastodynia, chronic mastitis of various types, negative mammogram studies for malignancy, and cancerophobia.[1]

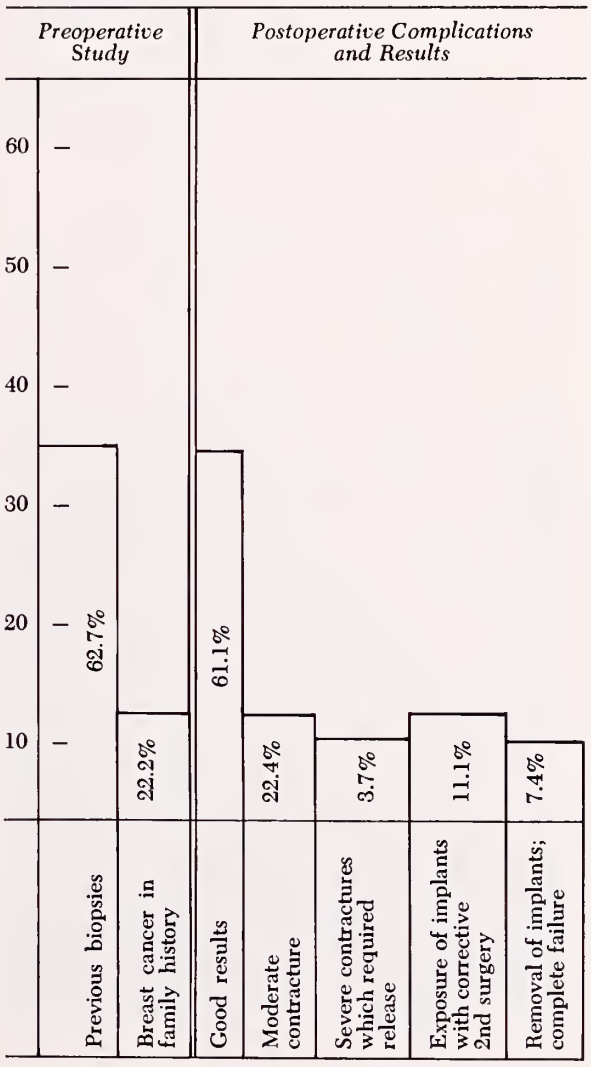
Thirty-four patients previously had one or several biopsies with recurrence of their symptoms (62.7 per cent). All 54 patients had multiple and bilateral breast masses which were benign by histological examination. The age varied from 26 to 72 years. Twelve patients had history of family cancer in the breasts (22.2 per cent).

The Operation

Surgery was performed on all 54 patients under general anesthesia. The skin of the breasts was prepared preoperatively by pHisoHex® scrub.

The patient was put flat on the back with both arms at 90° angles from the chest. A 15-centimeter incision in the inframammary skin fold was made symmetrically beneath each breast.

TABLE



*Dow Corning Corporation, Midland, Michigan.

Figure 1. The breast is lifted from the chest wall. The cavity made between the chest wall and breast gland is shown underneath the retractor.

The incision was carried through the skin and subcutaneous tissue down to the loose superficial fascia over the rib cage. A pocket was then made between the breast tissue and the chest wall using a combination of blunt and sharp dissection (Figure 1).

The gland was then removed by sharp dissection and extended from the incision to the sternum medially, the first rib superiorly, and mid-axillary line laterally (Figures 2 and 3).

All bleeding was controlled by electrocoagulation. It is important to remove all breast tissue

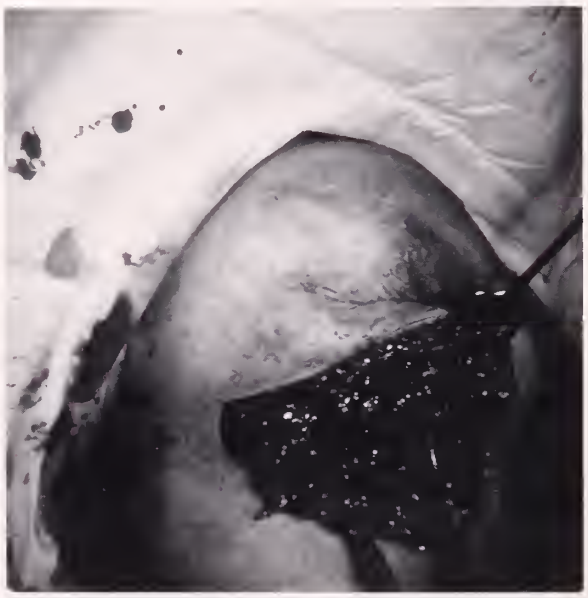


Figure 2. Starting the subcutaneous mastectomy after lifting the breast from the chest wall.

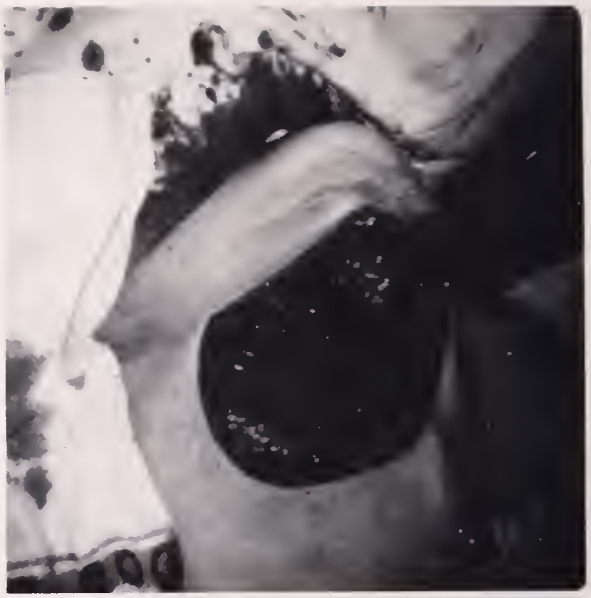


Figure 3. The breast has been removed. The remaining skin is lifted to show the cavity ready to accept the implant.

if possible. The subcutaneous mastectomy does not remove every bit of the mammary gland, but it does remove most of the culpable tissue.[5,6]

The implants, which had been soaked in neomycin solution 0.5 per cent were introduced into the two cavities to replace the removed glands. The wounds were then closed in layers using 3-0 dexon* sutures followed by continuous 2-0 nylon intradermal pull-out sutures.[7]

Drainage was accomplished by a hemovac and the entire chest was fitted to a surgical brassiere.** The patients were instructed to restrict heavy motion of their shoulders for three weeks.

Follow-up and Complications:[4,6] No hospital complications were encountered (see Table). All 54 patients were discharged in satisfactory condition after a short hospital course varying from four to 10 days. The following complications occurred in 21 patients (38.8 per cent) several months after surgery. *Firmness of the Breast and Contracture of the Capsule:*[9] Cronin and Greenberg demonstrated that the firmness after silastic implant is due to the formation and subsequent contracture of a thick fibrous capsule around the implant.[3,6,9] Eleven patients (22.4 per cent) developed moderate contracture around the capsule with a feeling of tightness. Only two cases were severe enough to require subsequent surgery in order to release the contracture around the implants bilaterally. The final results were satisfactory (Figure 4).

*Polyglycolic acid—David & Geck
**Fredricks Mammary Support. Jobst—Toledo, Ohio

Figure 4. Four months postoperatively: firmness with severe contracture of the implants which required subsequent release by surgery.

Exposure: Six patients (11.1 per cent) developed exposure of the implants. They had final satisfactory results after replacing the implants under the posterior fibrous capsule through a secondary surgery. They were all unilaterals. Four patients developed exposure of the implants followed by second exposure after replacement as described above. All four (7.4 per cent) required complete removal of the implants bilaterally (Figure 5).

Results and Discussion

Postoperatively, the patients were followed closely from six months to seven years. They

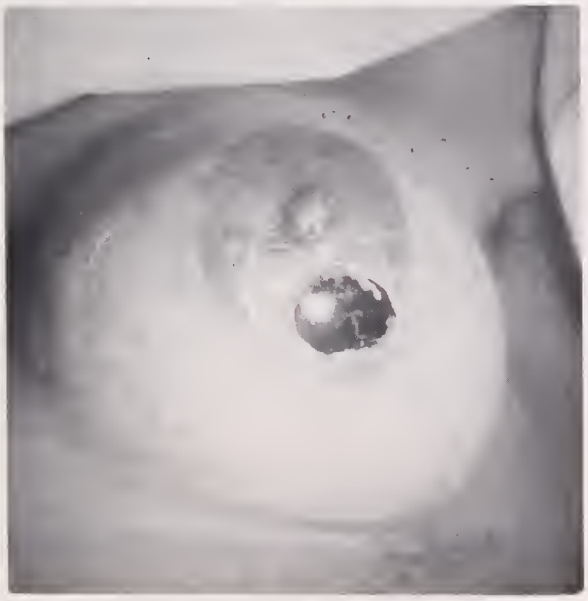


Figure 5. Exposure of the implant on one side, three months after surgery.

Figure 6. Satisfactory permanent result two years after surgery.

were graded from poor to good according to the following criteria:

a. Normal feeling of the breasts.
b. Normal appearance of the breasts.
c. Absence of all preoperative symptoms.
d. Satisfaction of the patients.

Four cases were considered complete failures (7.4 per cent). Six cases were considered as early failures with final satisfactory results after a second procedure to change the place of the implant (11.1 per cent). Two cases required release of the contractures with subsequent fair results. Eleven cases were considered only fair because of moderate contracture and firmness of the implants (22.4 per cent). The remaining 33 cases were considered good with satisfactory results (61.1 per cent: Figure 6).

The subcutaneous mastectomy is not the ideal and final answer to the severe and disabling fibrocystic disease of the breasts. The complications and morbidities are still high; however, while waiting for a better offer and safer procedure, the described surgery is still a very good alternative when the patients are well selected.

Bowers and Radlauer demonstrated in two cases of breast cancer after prophylactic subcutaneous mastectomies and reconstruction with silastic implants.[5] Pennisi, Capozzi, Walch and Christenson reported two similar cases.[8] This problem was not encountered in our patients.

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A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

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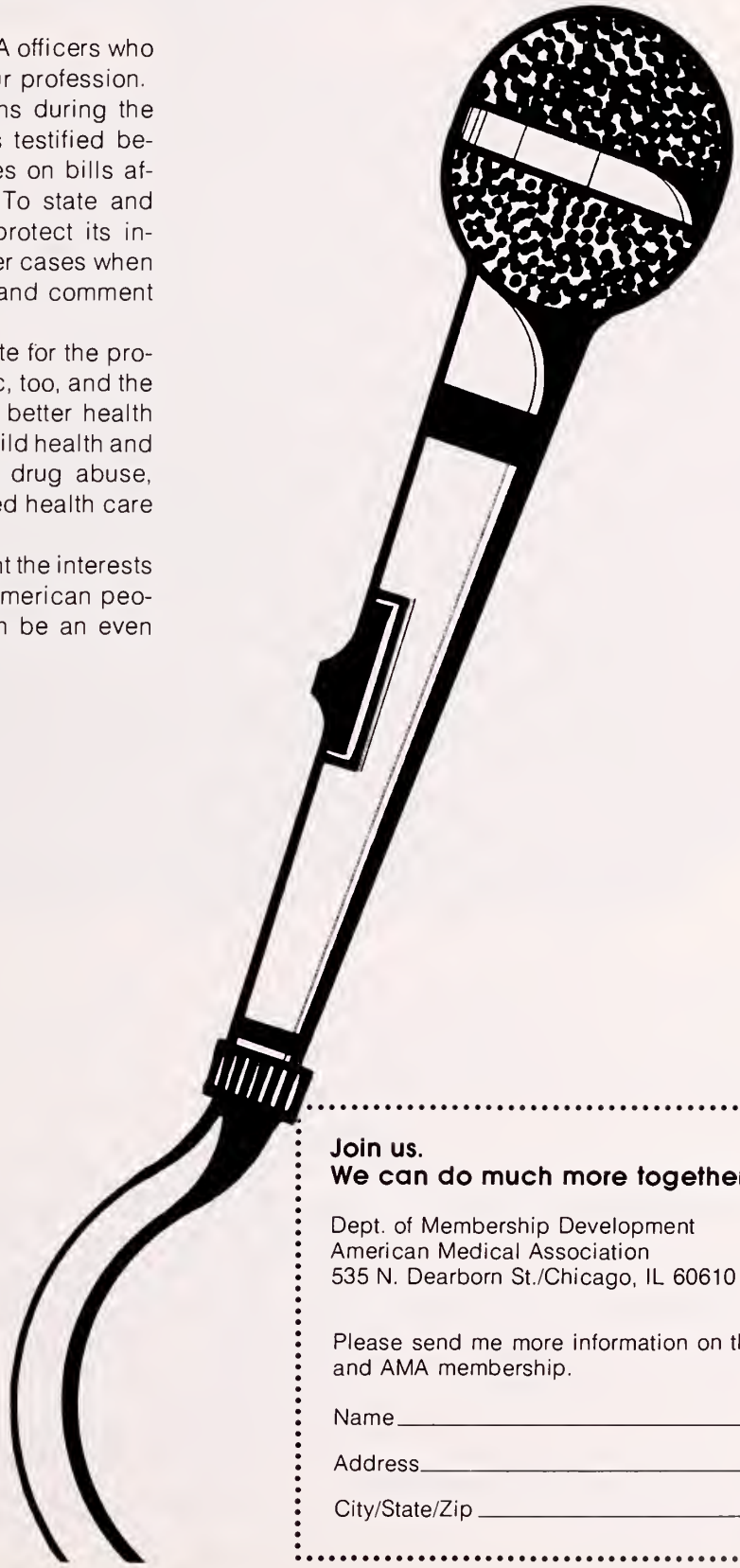

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A message from . . .

The President

ADIEU

THE summer of 1977 is almost over, and soon this President's Page will be the responsibility of Doctor Joe Smith of Dunbar. In the past year, I have met with 21 local societies and five State Associations; and have attended two AMA meetings as your President.

At the recent AMA Annual Meeting in San Francisco, the Honorable Joseph Califano, Secretary of HEW, addressed the AMA House of Delegates and told us that the health industry had no competition.

Apparently he had forgotten the large segment of health quackery we have in the U.S., as well as laetrile, diet fads, and vitamin mixtures alleged to cure everything.

His point about competition was made to compare health with the auto, steel, or other industries; and to emphasize that the health industry is more difficult to control unless the government can control the individual physician. At any rate, the cost of medical care is taking too large a bite out of our gross national product, according to Mr. Califano, and we must "think" our way out of this dilemma.

I am thinking of the vast veterans medical program and the Federal Postal Service and their splendid cost efficiency record!

And you, dear reader, keep on thinking—and practicing good medicine.

JOHN J. MAHOOD, M. D., *President*

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EDITORIALS

For the last year, Dr. John J. Mahood has been stomping, but literally, up and down the hills and valleys of this great state, carrying a simple but all-important message in his role as President of the West Virginia State Medical Association:

A CALL TO ARMS—'GET INVOLVED!'

"Get involved. More and more, the doctors must get involved."

One needs only to look around, and go to other physicians' sessions on the national, state or regional level, to hear again—and realize all too clearly—just what Doctor Mahood has told more than 20 component societies in West Virginia.

The threat to the health delivery system in this nation—and it can be called by no other term—is growing in every sector virtually day by day. Controls and more controls—all too frequently in an improperly conceived framework of cost containment without regard to availability and quality of care—have become perhaps the major over-all concern of those striving always to do a better job of providing good, solid patient care.

Doctor Mahood has come across loud and clear in his exhortations, and in his personal dedication to his duties as President. If there is an echo from the national level, in particular, amplifying what he has said and directed his energies toward accomplishing, that hardly is accidental.

Dr. James Sammons, AMA Executive Vice President who has described the Carter Administration as "long on shadow but short on substance," has noted that physicians are "respected as a profession." But, he has warned, "it scarcely needs saying that we—and by that I mean all physicians in this country—face tremedous challenges. And we can only face them successfully if we face them together. All of us. Not half of us. Or two-thirds of us. Or some other fraction."

AMA President John H. Budd has emphasized that "the Federal Government's efforts to plan and arrange the socio-economic lives of its people are a threat to more than freedom. They threaten to disarrange life itself. They gradually usurp the citizen's sense of responsibility toward his fellow citizens and his own sense of identity and purpose."

Richard E. Palmer, the AMA's Immediate Past President, has stressed that "when someone is critically sick, he expects his physician to be a

John J. Mahood, M. D., President

physician, not a cost accountant, or a stand-in for a cost accountant. To him, the bottom line of the computation is health and life itself. No individual—and ours is a nation of individuals—wants his care to fall victim to cost-effective common denominators. No individual wants his care to be rationed. . . ."

On Saturday afternoon, August 27—in the tranquil atmosphere of The Greenbrier at White Sulphur Springs—Doctor Mahood turns over the Medical Association helm to another who has grown to professional maturity in medicine's front-line trenches.

Dr. Joseph A. Smith of Dunbar is perpetual motion personified in his practice as a family physician in Nitro. He will bring to the Medical Association Presidency that most important kind of perspective, and background. And he'll be equally aware of the challenges and responsibilities ahead.

The past year has found the Medical Association in an increasingly active role in legislative and governmental affairs—not, as some of its critics insist, as a special force concerned only with special interests, but as an advocate of the people of this state in line with one of the key reasons for its existence, the promotion of public health.

The Association must devote increasing efforts and resources in this direction, again as a force for the public good. Doctor Smith knows this; so do others in the Association leadership; and so do increasing numbers among the more than 1,900 physicians who constitute the Association membership.

Further efforts to strengthen Association contributions to, and participation in, broadened medical education programs have received major attention over the past 12 months. Again, much more needs to be done. In particular, work by a number of Association committees needs to be stepped up to match that carried out by physicians working on medical education assignments, in the area of medical aspects of sports, and in medical scholarships.

Each new year always is a bit different, and for medicine in the modern era each new year is certain to be much different. But the result of all that medicine strives to accomplish does, and must, remain the same: better care for this nation's young and old.

The Medical Association is dedicated to that goal, and nothing that any critic or other force might say or attempt to do can change the Association objective.

Doctor Smith will need ever-increasing support from the Association membership in carrying out his responsibilities. He has demonstrated that he is deserving of, and can effectively use, that support. So—more and more—"physicians, get involved!"

AUGUST AND DOG DAYS

The Dog Days—presumably associated with the Dog Star, Sirius (also called Canicula), the brightest star in the heavens, located in the constellation of Canis Major—often cause some trying days and nights. Dog Days are the sultry part of summer and are said to be linked with that period in which the Dog Star rises at the same time as the sun. According to this astronomical definition it is presently reckoned from early July to the 11th of August. To me, this is too restrictive, for the good old Dog Days may not exert their unwelcome presence until late August.

Be that as it may, the days and nights are characterized by hot, humid weather (and mildewed bread). Windows are difficult to open, doors may stick, as well as the drawers of wardrobes. All of these factors are trying on the nerves. The roses are gone, the birds virtually have stopped their singing, and there is generally a pronounced drought, so that the grass becomes yellow and lifeless and the dust settles on the leaves and bushes and trees. Plainly, August lacks the glamour of June.

During this period tempers become short. The children are often listless and prone to mope about the house, tired of the long summer vacation. This makes it hard on the mother at home and, indeed, on the entire family. Some of the pleasant warm evenings are disturbed by the rasping of the dry-weather flies, the melancholy hoot of the owl, or the raucous barking of the neighbors' dogs. These are some of the unpleasant things about August. Patients passing through a phase of mental depression during this period must be affected by these dismal days and nights. Strangely enough, however, there are more suicides in June than in mid-summer.

The month of August is not entirely bad, despite its Dog Days. Many of the crops have been garnered, and the growing season is pretty well over. As a result, the noisy lawn mowers are heard less often. The sturdy late summer flowers are starting to blossom and the hot days are

becoming distinctly shorter. Then, too, there is the full moon of August which rises grandly like a big red ball due to the dust in the air. From the medical standpoint, there are few colds and coughs and sniffles (except in the hay-fever cases) and there is much less bronchitis. The warm days are often appreciated by people afflicted with arthritis or with rheumatism.

Then there are the vacations; August is really the vacation month. Many people, including physicians, come back from their summer holiday refreshed in body and spirit. As a consequence, physicians are likely to be more understanding of their patients' needs and more tolerant of their many complaints. And this is all to the good. August definitely has its attractions. Finally, it is a part of wisdom to accept with good grace the Dog Days of August; the somber period will not last long, for the days pass quickly, as do other days, and one can always look forward to the bright and sparkling days of September.

THE PROPER GOAL: GOOD, SUFFICIENT CARE

"In the face of government controls that would ration care, we must work for the sufficiency of good care," Dr. Richard E. Palmer, the AMA's Immediate Past President, has emphasized. The following amplification by Doctor Palmer of that general theme deserves, we feel, some careful review and understanding.

"Inasmuch as the federal government's socioeconomic efforts in health coverage point toward rationing of care . . . we can well ask: Wouldn't such dangerous rationing affect ALL Americans, under a fully tax-paid, federally-dominated form of National Health Insurance?

"The Carter Administration has made cost control a prerequisite for offering an NHI plan. However, if the plan tallies with the Democratic platform of 1976, what would keep it from being financially uncontrollable, just as Medicare has been?

"I can foresee two principal developments under an American adaptation of Britain's National Health Service, as intimated in the Democratic platform. First, in a variant of Parkinson's law, costs would expand to fill the taxes available for them, substantially because of bureaucratic attrition of the tax dollar. Second, as costs and taxes became too outrageous, the recourse would be a shrinkage in the quality and sufficiency of services. In other words, rationing.

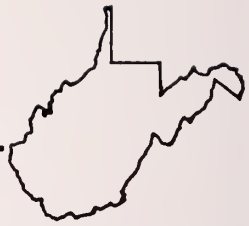
"If we physicians were raising costs appreciably beyond their equivalent in quality and sufficiency, there might be some ground for the current cost hysteria. But the facts show that we are far more a whipping boy for inflation than a culprit, far more a victim of it than an instigator.

"On that score, here are the latest statistics compiled by the AMA: From 1966 through 1973, professional expenses increased 98.6 per cent while net incomes rose 61.9 per cent in current dollars . . . When net income from medical practice is . . . deflated by the rise in the cost of living, the resultant increase in the real net income of physicians during the same period is estimated at 18 per cent. That's 18 per cent over eight years. And there is good reason to assume that the same pattern still applies.

"However, the heart of the matter is beyond the reach of statistics, certainly those in government's Consumer Price Index, which has been particularly stigmatic to hospitals. Nothing could be more unfair than to compare the steadily advancing, life-expanding services of physicians and hospitals, with the price of something that is relatively static, like a sack of potatoes or a suit of clothes. Also, it is unfair to make any cost comparison between technological improvements in health care and those in industry. As Professor Martin S. Feldstein of Harvard told a Congressional panel, 'Technological progress in hospitals does not involve making the old product more cheaply, but making a new range of products that are more expensive.'

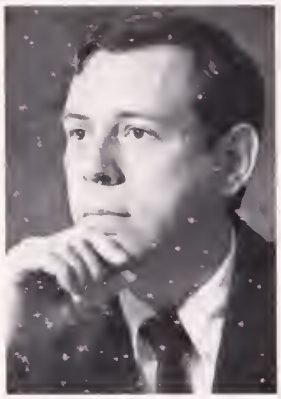
"Certainly there should be voluntary, local initiatives to avoid any waste in the provision of care, especially any waste resulting from needless duplication of facilities, equipment, and services. But how reasonably could possible duplication be handled under the Health Planning Act, with its lay administrators at the local level threading the needles made by the HEW Secretary? What qualifications have government planners or laymen for deciding dimensions in care, particularly since a medical procedure that is esoteric today may be standard tomorrow? And how qualified are such laymen to decide the distribution of facilities and their equipment, in terms of the patient with a sudden, acute illness?"

GENERAL NEWS



Program Completed For Annual Meeting Of Association

A Birmingham, Alabama, physician and a financial planning authority from New York City are the final two speakers to be announced for the program of the 110th Annual Meeting of the



Joel P. Schrank, M. D.

John H. Budd, M. D.

State Medical Association to be held August 24-27 at The Greenbrier in White Sulphur Springs.

Dr. David F. Bell, Jr., of Bluefield, Chairman of the Program Committee, said that Dr. Joel P. Schrank, Associate Professor of Medicine at the University of Alabama School of Medicine in Birmingham, will speak on the subject of "Non-Invasive Methods in Cardiology" during the second general session on Friday morning, August 26.

Gov. John D. Rockefeller IV

He also announced that Gerald M. Blank of New York City will discuss "Income and Estate Tax Planning" during the third general session on Saturday morning, August 27. Mr. Blank is Assistant Vice President and Manager of the Personal Financial Planning Department, Bache Halsey Stuart, Inc., New York City.

AMA President, Governor Honor Guests

It was announced previously that Dr. John H. Budd of Cleveland and Governor John D. Rockefeller IV will be honor guests and speakers.

Doctor Budd, who was installed as President of the American Medical Association during the AMA's annual meeting in San Francisco in June, will address the first session of the House of Delegates on Wednesday afternoon, August 24.

Governor Rockefeller will deliver the fifth annual "Thomas L. Harris Address" at 9 A.M. opening exercises on Thursday, August 25. This annual address was established with a bequest in the will of the late Dr. Thomas L. Harris, Parkersburg surgeon who served as President of the Association in 1945.

Ischemic Heart Disease Interest

Doctor Schrank also is Director of the Coronary Care Unit at the Veterans Administration Hospital in Birmingham. His major research interest is in ischemic heart disease. He is certified by the American Board of Internal Medicine in internal medicine and cardiovascular disease.

A native of Akron, Ohio, Doctor Schrank was graduated from the University of Akron and received his M. D. degree in 1964 from Case Western Reserve University. He served his internship and residency at the Harvard Medical Center and Harvard Medical Service, both at Boston City Hospital, and then went to Georgetown University Medical Center in Washington, D. C., in 1967, where he held a clinical fellowship in cardiology and a cardiovascular laboratory fellowship.

From Georgetown, Doctor Schrank went to the University of Virginia School of Medicine in Charlottesville in 1969 as Director of the Cardiac Catheterization Laboratory and Assistant Professor of Internal Medicine. He was elevated to Associate Professor at the University of Virginia in 1975, when he went to Birmingham.

Doctor Schrank is a Fellow of the American College of Physicians, the American College of Cardiology and the Council on Clinical Cardiology, American Heart Association.

Convention Timetable

The first general scientific session will follow 9 A.M. opening exercises on Thursday, August 25. The Friday session will begin at 9:30 A.M., and the session on Saturday, at 9 A.M.

The first session of the House of Delegates will be on Wednesday afternoon, August 24, beginning at 2:30. The second session will be on Saturday afternoon beginning at 2:30.

He is the author or co-author of some 15 articles and abstracts appearing in such publications as the Journal of the American Medical Association, Lawyers' Medical Cyclopedia, American Journal of Cardiology, and American Heart Journal.

Financial Group Board Member

An attorney, Mr. Blank is a member of the Board of Directors of the New York Chapter of the International Association of Financial Planners. He is a member of the Bar in Michigan and New York.

Mr. Blank received his education at the University of Michigan and New York University and holds A.B., J.D. and LL.M. degrees. He formerly was a tax partner with Hayt, Hayt & Landau, Attorneys, in New York; and was in the Detroit Tax Department and the New York Executive Office of Touche Ross & Company, Certified Public Accountants.

The presentation on "Income and Estate Tax Planning" by Mr. Blank during the third general session Saturday morning will mark a departure from the usual format. Also, following an absence of a number of years, a Workshop for Component Medical Society Officers, to be conducted by the State Medical Association staff, will be reinstituted. The workshop also will be held Saturday morning.

Luncheon for Past Presidents

A luncheon honoring Past Presidents of the West Virginia State Medical Association will be held at The Greenbrier on Thursday, August 25, during the 110th Annual Meeting.

Dr. Jack Leckie of Huntington, Immediate Past President, will preside, and invitations have been extended to all the Association's Past Presidents.

Joseph A. Smith, M. D.

Some 15 Association sections and affiliated societies will hold breakfast and other meetings —mostly on Friday.

The Annual Meeting will continue through Saturday, August 27, when Dr. Joseph A. Smith, Dunbar family physician, will be installed as Association President during the second and final session of the House of Delegates. Doctor Smith will succeed Dr. John J. Mahood of Bluefield as President.

Presidential Address

Doctor Mahood, a dermatologist, will deliver his address as the retiring Association President prior to the installation of Doctor Smith at the final House session on Saturday afternoon.

Pre-Convention Meetings

The Association's Council will have a pre-convention meeting at 9:30 A.M. on Wednesday, August 24. Its Chairman, Dr. Jack Leckie of Huntington, will preside. The first House session will follow in Chesapeake Hall at 2:30 P.M. Doctor Mahood will be the presiding officer.

From 6:30 to 7:30 P.M. on Wednesday, a President's Reception for Honor Guests will be held on the Old White Patio.

General Scientific Sessions

All three of this year's scientific sessions will be held in the theater, with the first to follow 9 A.M. opening exercises on Thursday, August 25. The other two sessions will be at 9:30 A.M. on Friday and 9 A.M. on Saturday.

Several of the guest speakers have accepted invitations to present talks at meetings of the sections and affiliated societies of the Association, most of which, as noted, are scheduled Friday.

Scientific Exhibits

The scientific exhibits will be located in Eisenhower Hall, Parlors A. B and C, adjacent to the theater. Physicians, members of the Auxiliary and their guests are urged to visit the exhibits, which will be open from 8:30 A.M. to the close of the morning sessions.

Formal Opening Exercises

Doctor Mahood will call the Annual Meeting to order at the 9 A.M. session on Thursday, with Dr. William E. Gilmore of Parkersburg to give the invocation. Doctor Mahood will make welcoming remarks and Doctor Bell and other members of his committee will be introduced. The first general scientific session will be held following the address by Governor Rockefeller.

Dr. George J. Hill II of Huntington, Professor and Chairman, Department of Surgery, and Associate Dean for Clinical Affairs, Marshall University Medical School, will serve as moderator for the first general session program, a "Symposium on Management of the Multiple Trauma Patient." The speakers and their topics will be:

"Orthopedic Aspects of the Patient with Multiple Injuries"—Charles M. Davis, Jr., M. D., Associate Professor of Orthopedic Surgery, West Virginia University School of Medicine, Morgantown; "Diagnosis and Treatment of Arterial Injuries"—Edwin C. James, M. D., Professor and Head of the Division of Thoracic Surgery, University of North Dakota Scool of Medicine, Grand Forks;

"Respiratory Problems Associated with the Multiple Trauma Patient"—John J. Rick, M. D., Assistant Professor of Anesthesiology and Director of the Intensive Care Unit, WVU, Morgantown; and "Neurosurgical Management in the Patient with Multiple Trauma"—Thomas W. Langfitt, M. D., Charles H. Frazier Professor and Chairman, Division of Neurosurgery, University of Pennsylvania, Philadelphia.

House of Delegates To Meet Twice During Meeting

The first session of the House of Delegates during the Annual Meeting at The Greenbrier will be convened at 2:30 P.M. on Wednesday, August 24. The second and final session of the House of Delegates will be held at 2:30 P.M. on Saturday, August 27.

Thursday Afternoon

A luncheon honoring Past Presidents of the State Medical Association will be held at 12:30 P.M. Thursday in the Tyler Room, with Doctor Leckie scheduled to preside. The Association's Resolutions Committee, with Dr. Richard E. Flood of Weirton presiding, will meet at 2 P.M. Thursday in the West Virginia Room.

Friday Breakfast Meetings

All but one (to be noted) of the Friday morning breakfast meetings will begin at 7:45. The meetings, speakers (where scheduled) and their topics follow:

West Virginia Academy of Ophthalmology and Otolaryngology, Dr. T. F. Hall II of Fairmont presiding, Washington Room, Virginia Wing;

Section on Internal Medicine, Dr. William H. Carter of Charleston presiding, Lee Room, Virginia Wing;

West Virginia Obstetrical and Gynecological Society, Dr. Samuel J. Bracken of Wheeling presiding, Tyler Room.

Section on Dermatology, Dr. William D. McLean of Beckley presiding; "Topical Antibiotics in the Treatment of Acne," Clark E. Julius, M. D., Knoxville, Tennessee, Jackson Room;

Section on Surgery, Dr. Walter E. Klingensmith of Beckley presiding; "Surgical Palliation for Esophageal Carcinoma," Edwin C. James, M. D., Grand Forks, North Dakota, Buchanan Room; and

Section on Orthopedic Surgery *(8 A.M.)*, Dr. Jack Pushkin of Charleston presiding; "Biomechanics and the Orthopedic Surgeon," Charles M. Davis, Jr., M. D., Morgantown, Pierce Room.

Second General Session

Doctor Bell will be the moderator at the second general session beginning at 9:30 A.M. on Friday. In addition to Doctor Schrank, announced above, the speakers and their topics will be:

"The Psychiatric Antecedents of Cancer"—Harold M. Voth, M. D., Senior Psychiatrist and

Nominating Committee To Meet On Friday, August 26

The State Medical Association's Committee on Nominations will hold a 5 P.M. meeting on Friday, August 26, in the Directors' Room of The Greenbrier.

The Committee will make nominations to the House of Delegates for President Elect, Vice President and Treasurer, and for Delegate and Alternate Delegate to the American Medical Association.

Association By-Laws also provide that nominations may be made from the floor for these offices, to be filled by the House in balloting at its final session on Saturday, August 27, the final day of the Association's 110th Annual Meeting.

Dr. A. Thomas McCoy of Charleston will serve as Chairman of the Committee on Nominations, with other members to include: Robert R. Weiler, Wheeling; Robert J. Nottingham, Morgantown; Robert W. Bess, Jr., Piedmont; M. V. Kalaycioglu, Shinnston; Louis W. Groves, Jr., Richwood; and David F. Bell, Jr., Bluefield.

In addition, one of the Kanawha Medical Society's two Councilors will serve on the Committee under provisions of the By-Laws. That representative will be Dr. Carl J. Roncaglione of Charleston.

Psychoanalyst, The Menninger Foundation, Topeka, Kansas; and "Management of the Gonorrhea Patient"—David Hager, M. D., Clinical Research Investigator, U. S. Public Health Service Center for Disease Control, Atlanta.

Friday Afternoon Schedule

The Board of Trustees of the West Virginia Medical Institute, Inc., with Dr. Harry S. Weeks, Jr., of Wheeling presiding, will meet at 12:30 P.M. in the Directors' Room.

Also meeting Friday afternoon will be the following sections and affiliated societies of the Association:

West Virginia Chapter, American College of Emergency Physicians, Dr. Donald R. Lantz of Parkersburg presiding; "Not All Shock Lung is Due to Shock," John J. Rick, M. D., Morgantown; and "The Irritable Myocardium in the Emergency Department," Joel P. Schrank, M. D., Birmingham, Alabama; 12:30 P.M., Tyler Room;

West Virginia District Branch, American Psychiatric Association, Dr. Donald C. Carter of Morgantown presiding; "Haldol Titration for the Posthospitalization," Roy G. Carter, M. D., Medical Director, Georgia Psychiatric Institute, and Clinical Assistant Professor of Psychiatry, Emory University School of Medicine, Atlanta; 2 P.M., Lee Room;

Section on Orthopedic Surgery, Dr. Jack Pushkin of Charleston presiding; "Biomechanics and the Orthopedic Surgeon," Charles M. Davis, Jr., M. D., Morgantown; 2 P.M., Van Buren Room;

West Virginia Chapter, American Academy of Pediatrics, Dr. Herbert H. Pomerance of Charleston presiding; "A Potpourri of Pediatric Dermatology," Clark E. Julius, M. D., Knoxville, Tennessee; 2 P.M., Fillmore Room; and

West Virginia Chapter, American Society of Internal Medicine, Dr. Richard G. Starr of Beckley presiding; 4 P.M., Jackson Room.

The Association's Committee on Nominations, with Dr. A. Thomas McCoy of Charleston presiding, will meet at 5 P.M. in the Directors' Room.

Saturday Morning Schedule

The West Virginia Radiological Society and the Section on Urology, with Drs. Orlando F. Gabriele of Morgantown and A. Thomas McCoy of Charleston presiding, will meet at 8 A.M. Saturday in the Buchanan Room. The guest speaker will be John J. Rick, M. D., of Morgantown, whose topic will be "Anticipation and Management of Contrast Media Reactions."

Also meeting at 8 A.M. Saturday, in the Directors' Room, will be the West Virginia State Society of Anesthesiologists. Dr. Jeanne A. Rodman of Morgantown will preside.

In addition to the Workshop for Component Medical Society Officers and the talk by Gerald M. Blank, as noted above, Dr. Clark E. Julius of Knoxville, Tennessee, will be the first speaker for the third general session beginning at 9 A.M.

The 1977 Program Committee

Dr. David F. Bell, Jr., of Bluefield is Chairman of the Program Committee for the 110th Annual Meeting of the West Virginia State Medical Association. Other members of the Committee are Drs. N. LeRoy Lapp of Morgantown, Tony C. Majestro and Ralph S. Smith, Jr., both of Charleston; Joseph A. Smith of Dunbar, and Charles E. Turner of Huntington.

No Registration Fee for Members

Members of the West Virginia State Medical Association will not be assessed a registration fee in connection with the 110th Annual Meeting at The Greenbrier in White Sulphur Springs, August 24-27.

Interns, residents and medical students also will be registered without charge.

There will be a registration fee of $50 for out-of-state physicians attending the meeting.

Saturday. Doctor Julius, Head of the Division of Dermatology and Instructor in Clinical Dermatology at the University of Tennessee Memorial Research Center and Hospital in Knoxville, will speak on "Herpes Simplex, Type I and Type II."

Second House of Delegates Session

Doctor Mahood again will be the presiding officer at the second and final House of Delegates session in Chesapeake Hall at 2:30 P.M. on Saturday.

Along with his Presidential Address and the installation of Doctor Smith, the agenda will include election of other Association officers and consideration of several business items.

Medical School Alumni Events

Cocktail parties will be held by the West Virginia University School of Medicine's Alumni Association Thursday evening, and by the University of Virginia Medical School Foundation and the West Virginia Chapter, Medical College of Virginia Alumni Association, Friday evening.

Dr. Clark K. Sleeth will be in charge of the WVU festivities in the West Virginia Room Thursday at 6 P.M. Drs. James C. Respess, J. Brookins Taylor and William C Morgan will serve in the same role for the University of Virginia affair at the same hour Friday evening in the Chesapeake Bay. Dr. Joseph C. Woofter of Parkersburg will be in charge of the Medical College of Virginia event at 6:30 P.M. Friday on the Old White Patio.

Friday Auxiliary Dinner Dance

The Auxiliary to the State Medical Association has scheduled a dinner dance (music by "Gingerbread," Pittsburgh) in Colonial Hall beginning at 8 P.M. The Cabell County Auxiliary will be the host, with Mrs. Nazem Abraham of Huntington serving as Chairman. All physicians, their wives and others registered for the State Medical Association convention are invited.

Saturday Evening Reception

New and continuing officers of the State Medical Association will be honored at a cocktail party and reception from 6:30 to 7:30 P.M. Saturday on the Colonial Hall Terrace. All members of the Association and Auxiliary and their families, representatives of scientific exhibitors and convention guests are cordially invited.

Advance Registration Heavy

Advance registration for the Annual Meeting at The Greenbrier has been heavy. As this issue of *The Journal* went to press, more than 600 persons had made reservations.

Tax Planning Session, Workshop On Program This Year

In a departure from the format of previous years, physicians attending the Medical Association's Annual Meeting this month at The Greenbrier will hear a Saturday morning, Augst 27, educational presentation on "Income and Estate Tax Planning."

The subject will be presented by Mr. Gerald M. Blank, Assistant Vice President and Manager of the Personal Financial Planning Department of Bache Halsey Stuart, Inc., in New York City.

The Program Committee for the Annual Meeting felt the material, interspersed with several presentations of a scientific nature during the Convention's three general forenoon sessions, would add some desirable new balance to the overall agenda.

Mr. Blank's 9:45 A.M. presentation will follow a 9 A.M. paper on "Herpes Simplex, Type I and Type II," by Dr. Clark E. Julius, Instructor in Clinical Dermatology at the University of Tennessee; and will precede another new program offering in the form of a workshop for officers of component medical societies.

Such things as the collection and remittance of dues, legislative contacts, improved State Association-local society communications, more effective scientific programs at the local level and related matters will be discussed by the Association's State Office staff and the component society representatives at the 10:45 A.M. workshop.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Aug. 27	Wheeling	Seminar in Ob-Gynecology
Sept. 8, 9	Morgantown	Hal Wanger Family Practice Conference
Sept. 16, 17	Charleston	Emergency Room Practice
Sept. 23, 24	Morgantown	Regional Meeting of ACP
Sept. 22-24	Morgantown	Second Annual Conference on Histological Techniques
Oct. 5	Wheeling	CIBA Medical Horizons Program on Hypertension
Oct. 7, 8	Morgantown	Cardiology Teaching Days
Oct. 8	Wheeling	Selected Topics in Internal Medicine
Oct. 13	Morgantown	Pediatric Day—Gastroenterology
Oct. 25	Wheeling	Fort Henry Academy of Medicine
Oct. 28, 29	Morgantown	Neurosciences Teaching Day

Sports Activities Scheduled For Doctors, Auxiliary

Golf, tennis and skeet competition again will be offered during the annual meetings of the West Virginia State Medical Association and its Auxiliary at The Greenbrier August 24-27.

Dr. L. Dale Simmons of Clarksburg will be in charge of the Men's Medical Golf Tournament, won last year by Dr. Franklin W. Mallamo of Fairmont. There again will be a $5 registration fee, and competing physicians may play their rounds during any morning or afternoon on Thursday through Saturday, August 25-27.

Doctor Simmons said that specific starting times and other rules will be in effect, and he said competitors must inform the starter when they begin their official 18 holes of medal play. All tournament play must be completed by 4 P.M. on Saturday to permit the awarding of golf and other prizes during an evening reception to honor new officers of the State Medical Association.

Mrs. William E. Gilmore of Parkersburg will be defending low gross honors she won last year in the women's golf play, for which Mrs. James T. Hughes of Ripley will be the Chairperson. That tournament, along with the women's tennis competition under the direction of Mrs. Joseph A. Maiolo of Beckley, will be held on Friday afternoon.

Dr. Harold Selinger of Charleston again will be in charge of the men's tennis play, planned for Thursday afternoon. Competition in both the women's and men's net competition will be limited to doubles, with those entering to register at the tennis court pro shop at The Greenbrier.

Dr. O. M. Harper of Clendenin, who will be in charge of the skeet tournament, said that there will be a 100-bird shoot with contestants using either 20- or 12-gauge shotguns—and with no former trophy winners eligible to compete.

State Physicians Certified

Several state physicians who have been certified by their specialty groups recently have been reported to *The Journal.*

Dr. Sarjit Singh of Weirton has been named a Diplomate of the American Board of Psychiatry and Neurology, Inc., in neurology.

Dr. Joseph C. Woofter of Parkersburg has been named a member of the American Board of Dermatology.

State Medical Association Lists Names of New Members

The following is a list by component societies of new members of the West Virginia State Medical Association elected from January 1 through June 30, 1977:

Cabell

Paul V. Akers	Huntington
Patrick L. Brown	"
Robert W. Coon	"
Cecilia B. Fabella	Wayne
Sotero F. Fabella	"
Stephen J. Feaster	Huntington
Kenneth M. Fink	"
John D. Harrah	"
Ruth C. Harris	"
George J. Hill II	"
James A. Huntzinger	"
Maurice A. Mufson	"
Prabhudas K. Patel	"
Eduardo A. Rivas-Pardo	"
Everett B. Wray III	"

Central West Virginia

Porfirio R. Pascasio	Weston

Eastern Panhandle

John McL. Adams	Ranson
Edward F. Arnett	Martinsburg
Jesse N. Clore, Jr.	Ranson
Gerald T. Golden	Martinsburg
Vettivelu Maheswaran	Ranson
Arthur B. Soule III	Martinsburg
M. Derek West	"
Richard A. Yates	Shepherdstown

Fayette

Honorato M. Aguila	Oak Hill
Renato R. Castillo	Montgomery
Lewis A. Cook	Fayetteville
Afif S. Habash	Montgomery
Serafino S. Maducdoc, Jr.	Oak Hill
M. U. Maminta	" "
Antreas D. Mesrobian	Charlton Heights
Saghir Ur Rehman Mir	Montgomery
Abraham T. Tan	"
James T. Zipagan	Charlton Heights

Greenbrier Valley

Valerie M. Lobo	Ronceverte
Robert K. Modlin	"
Brarat R. Patel	Rainelle
Hanmant L. Rajguru	Ronceverte

Harrison

Roberto Cunanan	Clarksburg
Chinmay K. Datta	"
Jae R. Kim	Clarksburg
Kenneth B. Lauren	West Union
Florencia C. Lopez	Clarksburg
Gerardo Lopez	"
James Paul Markham	Bridgeport
Douglas E. McKinney	Clarksburg
Gunter Schwarzbart	"
William J. Sembello, Jr.	"
Arthur Nelson Ward	Bridgeport

Kanawha

James K. Egnor II	Charleston
Edmundo E. Figueroa	"
Fred F. Holt	"
Rabindran Israel	"
William T. McClellan	"
Thomas W. Mou	"
Patrick K. Murray	Dawes
David A. Santrock	Charleston
Eduardo M. Suson	"

Logan

Maximo C. Abellana	Logan
Ulysses D. Agas	"
Jitendra M. Amin	"
Nicasio C. Flores	"
Alberto M. Garma	"
Vicente A. Gueco	"
Eddie Hermosisima	"
Ernesto C. Manuel	"
Ernesto M. Navato	"
Shirish B. Patel	"
Vimal B. Pathak	"
Rodney L. Stephens	"

Marion

Richard Gnegy	Fairmont
Indravadan I. Patel	"

Marshall

Oscar S. Irisari	Moundsville
Beda M. Llagas	Glen Dale
Elisa M. Sison	Moundsville

Mason

David W. Cole	Pt. Pleasant

McDowell

Necmettin Okcu	Welch
Andres L. Rago	"
Francisco A. Rosalis	"
Rodolfo P. Suaverdez	"
Bernard M. Swope	"
Robert C. Yee	"

Mercer

Arsenio S. Angus, Jr.	Princeton
John A. Anziulewicz	Bluefield
Surrinder Chopra	"
William Harris Epstein	Princeton
M. Salim Hajjar	Bluefield
Joseph T. Hsu	"
Reynaldo D. Jose	"
Bruce L. Lasker	"
Khaled Sanadiki	"
Peter M. Schwab	"
Yen-Seng Sung	Muskogee, Okla.
Vittorio Torrisi	Princeton
Albert C. Yu	"

Mingo

Samuel P. Rojas	Williamson
Govindarju Subramani	"

Monongalia

John A. Bellotte	Morgantown
Brian Cosman	"
Kjell Dahlen	"
John H. Ellyson	"
Alex Margaret Hendrick	"
David J. Hendrick	"
Bette G. Hinton	"
Rashida Khakoo	"
Ronica Kluge	"
Vadrevu K. Raju	"
Douglas Seaton	"
Louise E. Van Riper	"

Ohio

Federico L. Ampil	Wheeling
Rodrigo V. Blanco	"
Antonio M. Domaoal	"
James C. Durig	"
William G. Gardner	Akron, Ohio
Richard S. Glass	Wheeling
David A. Kappel	"
Kil Un Lee	"
Jang K. Oh	"
Richard G. Stevenson II	"
J. K. Tan	"
Jeffrey M. Yost	"

Parkersburg Academy

Rogelio O. Bantug	Sistersville
Ophelia D. Cansino	Parkersburg
Windell Tan Chua	"

Preston

Simon P. Cohn	Kingwood
Ruby N. Mata	Hopemont

Raleigh

Beverly J. D. Al-Yamour	Beckley
Henry P. Gosiene	"
R. Randolph Powell	"
Francisco U. Puig, Jr.	"
Richard M. Thompson	"
Cirilo Z. Villanueva	"

Tygart's Valley

Francisco Becerra	Elkins
Amitava Ghosal	Philippi
Pandurangam K. Hariprasad	"
Dhirendranath Patnaik	Parsons
Pravin J. Shah	Elkins

Amendment To Constitution Set For Vote Of House

The following proposed amendment to the State Medical Association's Constitution will be up for House of Delegates Action on Wednesday, August 24, during the Association's 1977 Annual Meeting at The Greenbrier in White Sulphur Springs:

PROPOSED AMENDMENT TO THE CONSTITUTION

(To Be Acted Upon Finally at the First Session of the House of Delegates During the 1977 Annual Meeting)

Amend Article IX, Sections 1, 2, 3 and 4, to read as follows:

Sec. 1. The officers of this Association shall be a President, a President Elect *who shall automatically succeed to the Office of President*, a Vice President, an Executive Secretary, a Treasurer, fifteen Councilors to be elected as provided in Section 2 of this Article, and *three* Councilors-at-Large, who shall be the retiring president and his *two immediate predecessors.*

Sec. 2. The officers, except *hold-over Councilors, the President and the Executive Secretary*, shall be elected annually. The terms of the Councilors shall be for two years, one from each Councilor District being elected by the House of Delegates every second year as shall be provided for in the By-Laws for reapportionment of Council Districts. No Councilor shall be eligible to succeed himself after four years, as Councilor, but he may be elected after two years' absence from the Council. All these officers shall serve until their successors are elected and installed.

The term of the President, President Elect, Vice President, and Treasurer elected at the annual meeting in 1956 shall begin on January 1, 1957, and end on the last day of the annual meeting in that year. Thereafter, the term of the elective officers, except members of the Council, shall be for the period of one year beginning with the installation of the President at the final session of the House of Delegates at each annual meeting.

The term of office of Councilors shall be for a period of two years beginning with the installation of the incoming President and ending on the last day of the second succeeding annual meeting, except as provided in the By-Laws pertinent to reapportionment of Councilor Districts.

Sec. 3. The President Elect, Vice President, *Treasurer and Councilors in those districts where two-year terms expire* shall be elected by the House of Delegates at each annual meeting.

Sec. 4. The retiring President shall be Chairman of the Council for the year following his term of office, and shall then serve another *two years* as Councilor-at-Large. Thereafter he shall be eligible for election to any office of the Association except President Elect or Vice President.

(Adoption of this amendment, with new or amended language in italics, is necessary to clarify procedure for the President Elect to advance to the Presidency; for election of Councilors; and to remove other present inconsistencies between the Constitution and By-Laws relative to the Junior Councilor and Executive Secretary.)

Auxiliary Completes Program For 53rd Annual Meeting

Mrs. Chester L. Young of Kansas City, Kansas, will be among honor guests when the Auxiliary to the West Virginia State Medical Association holds its 53rd Annual Meeting at The Greenbrier in White Sulphur Springs August 24-27.

The meeting again will be held concurrently with the Annual Meeting of the State Medical Association. Mrs. Young was installed in San Francisco in June as the new President of the American Medical Association Auxiliary.

Mrs. Chester L. Young

Also addressing the Auxiliary will be Mrs. Linus W. Hewit of Tampa, Florida, President of the Auxiliary to the Southern Medical Association.

More than 200 wives of physicians are expected to attend the Auxiliary's business sessions, over which Mrs. J. L. Mangus of Charleston, the State Auxiliary's President, will preside.

Pre-Convention Meetings

An invitation has been extended to all Auxiliary members to attend the first session of the State Medical Association's House of Delegates on Wednesday, August 24, at 2:30 P.M. Dr. John H. Budd, President of the American Medical Association, will be the principal speaker.

Mrs. Mangus then will preside at a 4 P.M. preconvention Auxiliary Board meeting in the Fillmore-Van Buren Rooms.

Opening Convention Exercises

Members of the Auxiliary also have been invited to attend formal opening ceremonies of the State Medical Association's 110th Annual Meeting at 9 A.M. on Thursday, August 25, in the theater. Governor John D. Rockefeller IV will deliver the fifth annual "Thomas L. Harris Address."

Following the opening exercises, the Auxiliary members will go to the Fillmore-Van Buren Rooms for the formal opening of their convention, with Mrs. Mangus in charge.

First General Session

The keynote address by Mrs. Young will highlight the initial session at 9:45 A.M. Dr. John J. Mahood of Bluefield, President of the State Medical Association, will be recognized for brief remarks.

Mrs. Young's Auxiliary Activities

Mrs. Young's activities with the national Auxiliary have included serving as Second Vice President, as a member of the Board of Directors for two years, and as Chairman of the Bylaws Committee for two years. Prior to those appointments, she was North Central Regional Vice President for three years and AMA-ERF Chairman for four years.

An auxiliary member for more than 25 years, Mrs. Young served on the state level as Parliamentarian, and in many chairmanships and vice presidential positions before being elected President in 1961. She was President of her county auxiliary in 1954.

A "true Midwesterner," Lela May Carter Young was born in DeKalb County, Missouri, and graduated from Trinity Lutheran Hospital School of Nursing in Kansas City. She married the late Chester L. Young, M. D., a surgeon, in 1942. Mrs. Young has three children: Robert, a veterinarian; Ann, a nurse and flight attendant for Braniff International Airways; and Charles, a medical student. All three are married.

Mrs. Young's civic activities extend into many areas of community, political and church work. A Past President of the Optimisses Club, the Bethany Medical Center Auxiliary (where she initiated the Thrift Gift shop), and the FE of POE, Mrs. Young has been very active in these areas. In 1972, she was elected state President of the Hospital Auxiliaries of Kansas.

She is a member of the Methodist church, the National Woman's Republican Council, the YWCA Board and Eastern Star. A past Campfire Girls Leader, Mrs. Young is also President of the Wyandotte Federated Republican Club and a member of the Club of Parliamentarians.

Mrs. Young has resumed her nursing career on a part-time basis. She is an avid collector of old and new cookbooks (she has moret han 300), antique blue glass and animals (cats and dogs); and enjoys gardening, outdoor painting and traveling with her family.

Other Opening-Session Items

Other opening-session items will include the introduction of the convention Co-Chairmen, Mrs. A. G. Capinpin and Mrs. Robert E. O'Connor, both of Charleston; reports from officers and committee chairmen, recommendations from the pre-convention board meeting, election of the

Mrs. J. L. Mangus

1978 Nominating Committee, and introduction of component Auxiliary Presidents by the Regional Directors.

Bridge, Past Presidents' Breakfast

A bridge tournament beginning at 2:30 P.M. will be held on Thursday in The Trellis Lobby. The McDowell County Auxiliary will serve in the hostess role, with Mrs. A. J. Villani of Welch as Chairman.

At 8 A.M. on Friday, August 26, the Past Presidents' breakfast will be held, with Mrs. Robert R. Weiler of Wheeling, Immediate Past President of the Auxiliary, presiding.

Second General Session

The Second General Session at 9:45 A.M. on Friday in the Fillmore-Van Buren Rooms again will have Mrs. Mangus presiding with a highlight to be the address by Mrs. Hewit.

Other activities will include acknowledgment by representatives of the West Virginia University and Marshall University Schools of Medicine of AMA-ERF grants stemming from Auxiliary efforts. Mrs. Joseph Gilman of Clarksburg is State AMA-ERF Chairman.

Mrs. Young will install Mrs. J. T. Mallamo of Fairmont as the new Auxiliary President. Other officers will be elected after a report from the Nominating Committee, and Mrs. Mangus will receive the Past President's Pin from Mrs. Weiler. Mrs. Mallamo will deliver her inaugural address.

Friday Social Functions

The Kanawha County Auxiliary, with Mrs. James T. Hughes of Ripley serving as Chairman, will be hostess for golf on Friday afternoon. The Raleigh County Auxiliary, with Mrs. Joseph A. Maiola of Beckley serving as Chairman, will be hostess for tennis, also on Friday afternoon.

A dinner-dance (music by "Gingerbread," Pittsburgh) will be held in Colonial Hall beginning at 8 P.M. Friday. The Cabell County Auxiliary will be hostess, with Mrs. Nazem Abraham of Huntington serving as Chairman. All physicians, their wives and others registered for the State Medical Association convention are invited.

Post-Convention Board Meeting

Mrs. Mallamo will preside at the post-convention conference and board meeting at 10 A.M. on Saturday, August 27, in the Fillmore-Van Buren Rooms.

Saturday Afternoon Agenda

Auxiliary members are invited to attend the second and final session of the State Medical Association's House of Delegates on Saturday at 2:30 P.M., at which time Dr. Joseph A. Smith of Dunbar will be installed as the Association's President, and other Association officers will be elected.

Other Convention Matters

Those Auxiliary members who plan to participate in bridge, golf and tennis are urged to sign up in advance at the registration desk.

AMA Chief Speaker At Weirton Family Physician Event

Criticizing the federal government's handling of a number of current health issues in the United States, Dr. Richard E. Palmer of Alexandria, Virginia, then President of the American Medical Association, addressed the annual Family Physicians Recognition Dinner held by the Department of Family Practice of Weirton General Hospital in Weirton on May 25.

Doctor Palmer, touching on a wide range of health care issues, called the concept of socialized medicine a "service mired in red tape, red ink and a hyped-up demand for services."

"People are waiting for surgery for years under systems of socialized medicine," he commented.

Dr. Richard E. Palmer (left) of Alexandria, Virginia, then President of the American Medical Association, was the featured speaker at the annual Family Physicians Recognition Dinner held in Weirton in May. Above, Dr. Richard E. Flood of Weirton, a Delegate of the State Medical Association to the AMA, presents a plaque to Doctor Palmer for his outstanding service to the health community on the national level. The event is sponsored by the Department of Family Practice at Weirton General Hospital.

He observed that American medicine had been called "the finest in the world" by the National Observer.

"Although these are adverse days for American medicine," he noted, "70 per cent of the American people put the AMA in the position of being the number one organization in this country."

He described the structure of the AMA and its purpose, and cautioned against turning American medicine into a "public utility."

He described the manner in which certain statistics are used in various findings, noting that some of the statistics are selected ones which can be made to support any chosen argument.

He noted that the AMA has sponsored a National Health Insurance Program every year since 1965, and in commenting on President Carter's recent proposed nine per cent ceiling on the rise in hospital costs, he declared that the government should address itself to the true problem—inflation.

Doctor Palmer was given a welcome from the City of Weirton by Mayor Michael J. Andochick, Jr., and presented with a money clip.

Toastmaster for the dinner was Dr. Thomas J. Beynon, Medical Director of Weirton General Hospital.

Doctor Palmer was presented with a plaque for his outstanding contribution to health care on the national level by Dr. Richard E. Flood, member of the staff at Weirton General and a Delegate of the State Medical Association to the AMA.

Receiving the plaque for a similar contribution on the state level was Dr. Carl B. Hall of Charleston, Past President of the American Academy of Family Physicians. The presentation was made by Dr. Eli J. Weller, Chairman of the hospital's Department of Family Practice, and was accepted on behalf of Doctor Hall by Dr. Myer Bogarad, a longtime friend of Doctor Hall's.

The plaque for contribution on the local level was presented to the Hancock Unit of the West Virginia Division of the American Cancer Society. Accepting was Ron Sekersky, unit President.

Doctor Palmer was accompanied by Miss Barbara Ikes, Director of Office Scheduling for the AMA.

Medical Association Announces Winners Of Scholarships

Three men and one woman have been awarded four-year scholarships by the West Virginia State Medical Association to the West Virginia University School of Medicine.

Dr. Martha Jane Coyner of Harrisville, Chairman of the Association's Committee on Medical Scholarships, announced these winners who will receive $1,000 grants for each of their four years in medical school:

Linda Sue Adkins of Wayne; Barry V. Barrows of Parkersburg; Greg A. Imperi of Huntington; and Donald H. Moore of Buckeye in Pocahontas County.

Each of the four has been accepted by the WVU School of Medicine, and will begin studies this fall leading to an M. D. degree. The scholarships bring to 44 the number awarded by the

Linda Sue Adkins

Barry V. Barrows

Greg A. Imperi

Donald H. Moore

Medical Association to deserving students since it started its program in 1958.

Miss Adkins received a Bachelor of Science Degree in Medical Technology from Marshall University in 1975 and is now employed as a laboratory technician in research and development at the Technical Center of Union Carbide Corporation in South Charleston. She is the daughter of the late Earl M. Adkins of Wayne, and Mrs. Adkins.

Barrows, the son of Mr. and Mrs. Charles F. Barrows of Parkersburg, received a Bachelor of Arts Degree in Biology from WVU this spring.

Imperi received a Bachelor of Arts Degree in Physical Education and Health Education from Marshall University in 1974. He is a former member of the Marshall basketball team. The son of Professor Leo V. Imperi, a member of the Marshall faculty, and Mrs. Imperi of Huntington, he now is an orderly in the emergency room of St. Mary's Hospital in Huntington.

Moore received a Bachelor of Arts Degree in Biology from WVU in 1976, and did graduate work there in microbiology during the past academic year. He is the son of the late Charles E. Moore of Buckeye, and Mrs. Moore.

Until 1974, the Medical Association awarded two scholarships annually. It then increased the number to four with an objective of encouraging greater numbers of young physicians to establish their practices in West Virginia.

Under provisions of the scholarship agreement, recipients must agree to practice in West Virginia for four years following graduation and completion of postgraduate training and military obligations.

The Scholarship Committee conducted interviews of applicants from among this fall's first-year WVU School of Medicine class in Morgantown on June 11-12.

Committee members in addition to Doctor Coyner are Drs. R. L. Chamberlain of Buckhannon; Marshall J. Carper and Kenneth G. MacDonald, both of Charleston; John M. Daniel of Beckley; Thomas J. Holbrook of Huntington, John Mark Moore of Wheeling, and Clark K. Sleeth of the WVU Medical Center in Morgantown.

Occupational Lung Disease Course In September

A postgraduate course on Occupational Lung Disease will be held September 28-30 at the Lakeview Country Club in Morgantown.

Sponsors are the American College of Chest Physicians, the West Virginia University School of Medicine, and the National Institute of Occupational Safety and Health.

The course will cover relevant and recent advances in the detection, monitoring and treatment of chronic and acute occupational lung disease. Topics to be discussed are:

Epidemiology of industrial lung disease; what tests to do, how often, and to what purpose; early detection of occupational respiratory disease and its effect on prognosis; immunologic aspects of occupational lung disease; and occupational asthma, industrial bronchitis, extrinsic allergic alveolitis and byssinosis.

The course also will provide a thorough review of scientific and medical data on the diagnosis and monitoring of patients, as well as specific groups exposed to pulmonary hazards.

The continuing medical education offering meets the criteria for 15 and one-half credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

Dr. John J. Mahood (center) of Bluefield, President of the State Medical Association, made his official visit this spring to the Hancock County Medical Society. Shown with Doctor Mahood are Dr. Carlos L. Vasquez (left), Secretary-Treasurer of the Hancock Society, and Dr. George S. Kosar, President.

Visiting faculty members will be Drs. Jerome Kleinerman, Professor of Pathology, Case Western Reserve University; and Director, Pathology Department, St. Luke's Hospital, Cleveland; and Nicholas Sargent, Professor of Radiology, University of Southern California School of Medicine, Los Angeles.

The local faculty will include, from WVU, Drs. Brian A. Boehlecke, Assistant Professor of Medicine; Robert Burrell, Professor of Microbiology; Milton R. Hales, Professor of Pathology; David J. Hendrick (M. B., M.R.C.P.), Assistant Professor of Medicine; N. LeRoy Lapp, Professor of Medicine and Chief, Pulmonary Function Laboratory; James A. Merchant, Associate Clinical Professor of Medicine, and Director, Appalachian Laboratory for Occupational Safety and Health;

W. Keith C. Morgan, Professor of Medicine, and Chief, Division of Pulmonary Diseases; R. J. C. Pearson, Professor and Chairman of Community Medicine; Douglas A. Seaton (M. B., M.R.C.P.), Assistant Professor of Medicine; Geoffrey Taylor, Professor of Medicine, and Associate Director, Appalachian Laboratory for Occupational Safety and Health; and Robert H. Waldman, Professor and Chairman, Department of Medicine.

Also serving on the local faculty, from the Appalachian Laboratory for Occupational Safety and Health, will be John L. Hankinson, Ph.D., Chief, Medical Instrumentation Section, Clinical Investigations Branch; and Mr. Robert Reger, Chief, Epidemiological Investigations Branch.

The course co-directors will be Doctors Morgan and Lapp.

The tuition will be $150 for ACCP members, $175 for non-members, and $100 for residents, nurses and therapists.

Enrollment applications, which should be accompanied by tution remittance, may be forwarded to: American College of Chest Physicians, P. O. Box 93826, Chicago, Illinois 60670 (telephone 312-698-2200). Checks should be payable to the American College of Chest Physicians. Refunds, excluding $10 of the registration fee, will be made for cancellations received prior to September 14.

A block of rooms will be held at the Lakeview Country Club until September 1, after which reservations will be accepted on a space-available basis only.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication. *Meanwhile, please see a review of the book, "Current Pediatric Diagnosis and Treatment, Fourth Edition," on page xv of this issue of The Journal.—Editor.*

Current Medical Diagnosis & Treatment, by Marcus A. Krupp, M. D., and Milton J. Chatton, M. D., and associate authors. 1,066 pages. Price $16. Lange Medical Publications, Los Altos, California 94022. 1977.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

Obstetrics-Gynecology Course In Wheeling, August 27

A one-day continuing medical education course, "Current Concepts in Obstetrics and Gynecology," will be held by the Ohio Valley Medical Center in Wheeling on August 27, beginning at 8 A.M.

The speakers and their topics for the morning session will include:

"Use of Laparoscopy in the Diagnosis of Obscure Abdominal Disorders"—Terry A. Athari, M. D., Department of Obstetrics and Gynecology, Wheeling Division/West Virginia University Medical Center; "Estrogen and Endometrial Carcinoma"—Captain Douglas R. Knab, M. D., Medical Corps, U. S. Navy; and Chairman, Department of Obstetrics and Gynecology, Uniformed Services University of the Health Sciences, National Naval Medical Center, Bethesda, Maryland;

"Adolescent Gynecology"—E. Noel McIntosh, M. D., Associate Professor of Obstetrics and Gynecology and Medicine, WVU School of Medicine, Morgantown; and "Present Status of

the Uniformed Services University of the Health Sciences"—Doctor Knab.

Robert W. Leibold, M. D., Department of Obstetrics and Gynecology, Wheeling Division/WVU Medical Center, will lead a panel discussion following the morning presentations.

The afternoon speakers and their topics follow:

"Management of Diabetes in Pregnancy"—Jerome Aarons, M. D., Clinical Assistant Professor of Medicine and Obstetrics and Gynecology, Magee Women's Hospital, University of Pittsburgh; "Antenatal Monitoring — Critical Analysis of Current Method"—David J. S. Hunter, M. B., Ch. B., Associate Professor of Obstetrics and Gynecology, and Director, Fetal-Maternal Medicine, WVU, Morgantown;

"Intrapartum Monitoring" — Steve Caritis, M. D., Assistant Professor of Obstetrics and Gynecology and Pediatrics, Magee Women's Hospital, University of Pittsburgh; and "Obstetrical Anesthesia"—Roland Kennedy, M. D., Professor of Anesthesia, WVU, Morgantown.

A panel discussion to follow will be led by John W. Durkin, M. D., Clinical Professor and Chairman, Department of Obstetrics and Gynecology, Wheeling Division/WVU.

This course meets the criteria for eight credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

The fee will be $35 for physicians and $15 for graduate nurses, with no fee for residents and interns.

Bibliographical material on biomedical subjects may be obtained quickly and easily via computer now that the Health Science Libraries section of Marshall University's School of Medicine is linked to the MEDLINE network of the National Library of Medicine. Checking out the University's MEDLINE terminal are Mrs. Evelyn Hendon, Assistant Librarian and MEDLINE analyst, and Ed Dzierzak, audio-visual librarian.

Dr. Russel Kessel, Past President, Dies

Dr. Russel Kessel of Charleston, President of the West Virginia State Medical Association in 1954, died on June 17 in a Ripley hospital. He was 77.

Doctor Kessel, a surgeon, served on the Association's Council prior to becoming President.

A native of Ripley, he began practice in Charleston in 1927. He was President of the Kanawha Medical Society in 1940.

Doctor Kessel was former Chief Medical Examiner of the West Virginia Workmen's Compensation Fund and was former Chief of Staff of St. Francis Hospital in Charleston.

Russel Kessel, M. D.

He was instrumental in beginning the Association's medical scholarships program and served on the Medical Scholarships Committee from its inception in 1958 until the time of his death. He was Chairman of the Committee in 1962.

Doctor Kessel was graduated from West Virginia University and received his M. D. degree in 1925 from Jefferson Medical College of Philadelphia. He served his internship and residency at Jefferson Medical College Hospital and did postgraduate work at that hospital and at the University of Pennsylvania.

A retired Navy captain, he served for 52 months in the Navy Medical Corps during World War II, with assignment in the Pacific. He was appointed by President Truman to serve in the Selective Service System for Doctors. He was Chairman of the Association's Military Medical Affairs Committee from 1965 until the time of his death.

Doctor Kessel was a Fellow of the American College of Surgeons and the South Eastern Surgical Congress; and a member of the Kanawha Medical Society, the West Virginia State Medical

Association, the American Medical Association, and Phi Beta Pi and Phi Sigma Nu medical fraternities.

Active in community affairs, Doctor Kessel was a Past President of the Charleston Lions Club and the Navy League, and was Past Exalted Ruler, BPO Elks. He was a member of Christ Church United Methodist in Charleston, and also was a member of the Masons, Scottish Rite Bodies, Beni Kedem Shrine, Royal Order of Jesters and the American Legion.

Surviving are the widow, Mrs. Pauline Miller Kessel, and two daughters, Mrs. James A. Cross of Atlanta and Mrs. James T. Hughes of Ripley.

Endowment Fund Established To Honor Doctor Dyer

West Virginia's State Board of Health has established an endowment for a scholarship or lecture course in the Department of Community Health at West Virginia University's School of Medicine in honor of former State Health Director N. H. Dyer.

Doctor Dyer became Commissioner of Health on September 1, 1946, and was appointed State Director of Health on July 1, 1949, under a legislative enactment establishing the State Board of Health.

He served as the Board's appointee until June 30 of this year, when a new state health reorganization statute became effective and Governor John D. Rockefeller IV moved to appoint a new health chief to head an enlarged and restructured agency.

Dr. Harry O. Copher, Charleston dentist and Board of Health Chairman, asked that those interested in helping develop the tribute to Doctor Dyer send their contributions to West Virginia University Foundation, Inc., P. O. Box 894, Morgantown 26505.

Contributions are tax deductible. The Foundation is a non-profit, tax-exempt organization established for the benefit of WVU students.

Emergency Care Seminar Planned

An Emergency Care Seminar will be held in Charleston on September 16-17 by the Charleston Area Medical Center and the Charleston Division/West Virginia University Medical Center. The site will be the new Medical Education Building of the WVU Charleston Division located at 3110 MacCorkle Avenue, Southeast.

The program and other details of the seminar will appear in the September issue of *The Journal.*

Medical Meetings

Aug. 11-13—ACS, Big Sky, Mont.

Aug. 24-27—110th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 15-16—Medical Society of the District of Columbia, Washington, D. C.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 27-30—Am. Roentgen Ray Society, Boston.

Sept. 28-30—Occupational Lung Disease (Am. College of Chest Physicians, WVU, Natl. Institute of Occupational Safety & Health), Morgantown.

Sept. 28-30—ASIM, Washington, D. C.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 2-6—Am. Academy of Ophthalmol. & Otolaryngol., Dallas.

Oct. 10-13—AAFP, Las Vegas.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 15-19—Am. Society of Anesthesiologists, New Orleans.

Oct. 17-21—ACS, Dallas.

Oct. 23-26—Indiana State Medical Assn., Indianapolis.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Oct. 30—Nov. 4—Am. Society of Plastic & Reconstructive Surgeons, San Francisco.

Nov. 5-10—Am. Academy of Pediatrics, New York City.

Nov. 6-9—Southern Medical Assn., Dallas.

1978

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

April 5-6—W. Va. Chapter, Am. Academy of Pediatrics, Wheeling.

April 7-9—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

CONVENTION PROGRAM

110th ANNUAL MEETING

of the

West Virginia State Medical Association

THE GREENBRIER, WHITE SULPHUR SPRINGS

August 24-27, 1977

WEDNESDAY MORNING

August 24

(Eastern Daylight Time)

9:00-5:00—Registration, Main Floor Lobby.

9:30—Pre-Convention Meeting of the Council. Jack Leckie, M.D., *Presiding* (Lee Room, Virginia Wing).

WEDNESDAY AFTERNOON

2:30—First Session of the House of Delegates. John J. Mahood, M.D., *Presiding* (Chesapeake Hall).

Invocation—Carl B. Hall, M.D.

Address: John H. Budd, M.D., President, American Medical Association.

Presentation of AMA-ERF Checks to the West Virginia University and Marshall University Schools of Medicine.

Business Meeting.

WEDNESDAY EVENING

6:30-7:30—President's Reception for Honor Guests (Old White Patio).

THURSDAY MORNING

August 25

8:30-5:00—Registration, Main Floor Lobby.

Opening Exercise

(Theater)

9:00—Call to Order—John J. Mahood, M.D., President, West Virginia State Medical Association.

Invocation—William E. Gilmore, M.D.

Address of Welcome—John J. Mahood, M.D.

Introduction of David F. Bell, Jr., M.D., 1977 Program Committee Chairman, and other members of his Committee.

"The Thomas L. Harris Address"

Hon. John D. Rockefeller IV, Governor of West Virginia.

First General Session

"Symposium on Management of the Multiple Trauma Patient"

9:45-12:30

Moderator: George J. Hill II, M.D.

Charles M. Davis, Jr., M.D., Associate Professor of Orthopedic Surgery, West Virginia University School of Medicine, Morgantown. Subject: "Orthopedic Aspects of the Patient with Multiple Injuries."

Edwin C. James, M.D., Professor and Head of the Division of Thoracic Surgery, University of North Dakota School of Medicine, Grand Forks. Subject: "Diagnosis and Treatment of Arterial Injuries."

John J. Rick, M.D., Assistant Professor of Anesthesiology and Director of the Intensive Care Unit, West Virginia University School of Medicine, Morgantown. Subject: "Respiratory Problems Associated with the Multiple Trauma Patient."

Thomas W. Langfitt, M.D., Charles H. Frazier Professor and Chairman, Division of Neurosurgery, University of Pennsylvania, Philadelphia. Subject: "Neurosurgical Management in the Patient with Multiple Trauma."

12:30—Recess for Lunch.

12:30—Luncheon Honoring Past Presidents of the West Virginia State Medical Association. Jack Leckie, M.D., *Presiding* (Tyler Room).

THURSDAY AFTERNOON

2:00—Resolutions Committee—Richard E. Flood, M.D., *Presiding* (West Virginia Room).

THURSDAY EVENING

6:30—Cocktail Party. West Virginia University Alumni Association. Clark K. Sleeth, M.D., *In Charge* (West Virginia Room).

FRIDAY MORNING

August 26

Breakfast Meetings

7:45—West Virginia Academy of Ophthalmology and Otolaryngology. T. F. Hall II, M.D., *Presiding* (Washington Room, Virginia Wing).

7:45—Section on Internal Medicine. William H. Carter, M.D., *Presiding* (Lee Room, Virginia Wing).

7:45—West Virginia Obstetrical and Gynecological Society. Samuel J. Bracken, M.D., *Presiding* (Tyler Room).

7:45—Section on Dermatology. William D. McLean, M.D., *Presiding* (Jackson Room).

Guest Speaker: Clark E. Julius, M.D., Knoxville, Tennessee. Subject: "Topical Antibiotics in the Treatment of Acne."

7:45—Section on Surgery. Walter E. Klingensmith, M.D., *Presiding* (Buchanan Room).

Guest Speaker: Edwin C. James, M.D., Grand Forks, North Dakota. Subject: "Surgical Palliation for Esophageal Carcinoma."

8:00—Section on Orthopedic Surgery. Jack Pushkin, M.D., *Presiding* (Pierce Room).

Guest Speaker: Charles M. Davis, Jr., M.D., Morgantown, West Virginia. Subject: "Biomechanics and the Orthopedic Surgeon."

8:30-5:00—Registration, Main Floor Lobby.

Second General Session

(Theater)

Moderator: David F. Bell, Jr., M.D.

9:30—Harold M. Voth, M.D., Senior Psychiatrist and Psychoanalyst, The Menninger Foundation, Topeka, Kansas. Subject: "The Psychiatric Antecedents of Cancer."

10:15—Joel P. Schrank, M.D., Associate Professor of Medicine, University of Alabama School of Medicine, Birmingham. Subject: "Non-Invasive Methods in Cardiology."

11:00—Coffee Break.

11:15—David Hager, M.D., Clinical Research Investigator, U. S. Public Health Service Center for Disease Control, Atlanta. Subject: "Management of the Gonorrhea Patient."

12:00—Recess for Lunch.

12:00—Publication Committee. Stephen D. Ward, M.D., *Presiding* (Buchanan Room).

12:15—Meeting of Cancer Committee. David B. Gray, M.D., *Presiding* (Lee Room).

FRIDAY AFTERNOON

12:30—West Virginia Medical Institute, Inc., Board of Trustees. Harry S. Weeks, Jr., M.D., *Presiding* (Directors' Room).

12:30—West Virginia Chapter, American College of Emergency Physicians. Donald R. Lantz, M.D., *Presiding* (Tyler Room).

Guest Speakers:

John J. Rick, M.D., Morgantown, West Virginia. Subject: "Not All Shock Lung is Due to Shock."

Joel P. Schrank, M.D., Birmingham, Alabama. Subject: "The Irritable Myocardium in the Emergency Department."

2:00—West Virginia District Branch, American Psychiatric Association. Donald C. Carter, M.D., *Presiding* (Lee Room).

Guest Speaker: Roy G. Carter, M.D., Medical Director, Georgia Psychiatric Institute, and Clinical Assistant Professor of Psychiatry, Emory University School of Medicine, Atlanta. Subject: "Haldol Titration for the Posthospitalization."

2:00—West Virginia Chapter, American Academy of Pediatrics. Herbert H. Pomerance, M.D., *Presiding* (Fillmore Room).

Guest Speaker: Clark E. Julius, M.D., Nashville, Tennessee. Subject: "A Potpourri of Pediatric Dermatology."

4:00—West Virginia Chapter, American Society of Internal Medicine. Richard G. Starr, M.D., *Presiding* (Jackson Room).

5:00—Committee on Nominations. A. Thomas McCoy, M.D., *Presiding* (Directors' Room).

FRIDAY EVENING

6:00—Cocktail Party. The University of Virginia Medical School Foundation. James C. Respess, M.D., J. Brookins Taylor, M.D., and William C Morgan, M.D., *In Charge* (Chesapeake Bay).

6:30—Cocktail Party. West Virginia Chapter, Medical College of Virginia Alumni Association. Joseph C. Woofter, M.D., *In Charge* (Old White Patio).

8:00—Dinner-Dance. Music by "Gingerbread," and sponsored by Auxiliary. Hostess: Cabell County, Mrs. Nazem Abraham, Chairman (Colonial Hall).

SATURDAY MORNING

August 27

8:00—West Virginia Radiological Society and Section on Urology. Orlando F. Gabriele, M.D., and A. Thomas McCoy, M.D., *Presiding* (Buchanan Room).

Guest Speaker: John J. Rick, M.D., Morgantown, West Virginia. Subject: "Anticipation and Management of Contrast Media Reactions."

8:00—West Virginia State Society of Anesthesiologists. Jeanne A. Rodman, M.D., *Presiding* (Directors' Room).

9:00-2:00—Registration, Main Floor Lobby.

Third General Session

(Theater)

Moderator: John J. Mahood, M.D.

9:00—Clark E. Julius, M.D., Head of the Division of Dermatology, Instructor in Clinical Dermatology, University of Tennessee Memorial Research Center and Hospital, Knoxville. Subject: "Herpes Simplex, Type I and Type II."

9:45—Gerald M. Blank, Assistant Vice President and Manager of the Personal Financial Planning Department, Bache Halsey Stuart, Inc., New York City. Subject: "Income and Estate Tax Planning."

10:30—Coffee Break.

10:45—Workshop for Component Medical Society Officers. Conducted by State Medical Association Staff.

SATURDAY AFTERNOON

2:30—Second and Final Session of the House of Delegates. John J. Mahood, M.D., *Presiding* (Chesapeake Hall).

Invocation—Joe N. Jarrett, M.D.

Presidential Address: John J. Mahood, M.D., President, West Virginia State Medical Association.

Presentation of New Officers of Auxiliary to the West Virginia State Medical Association.

Presentation of Honor Guests.

Business Meeting.

Election of Officers.

Installation of Joseph A. Smith, M.D., of Dunbar, as President of the West Virginia State Medical Association.

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring Officers of the West Virginia State Medical Association (Colonial Hall Terrace).

A WORD OF THANKS

The 1977 Program Committee, and the officers and members of the West Virginia State Medical Association, wish to acknowledge with sincere thanks grants received from the following Firms to help support the Scientific Program for this year's 110th Annual Meeting:

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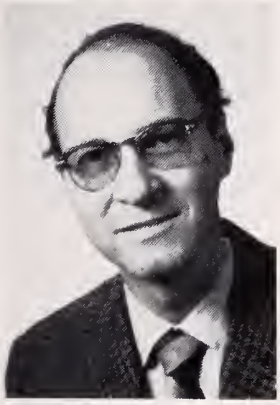
1977 PROGRAM COMMITTEE

David F. Bell, Jr.
Bluefield
Chairman



N. LeRoy Lapp
Morgantown

Ralph S. Smith, Jr.
Charleston

Joseph A. Smith
Dunbar

Tony C. Majestro
Charleston

Charles E. Turner
Huntington

DELEGATES AND ALTERNATES

BOONE (2)—Delegates, A. E. Glover and Harold H. Howell, Madison. Alternates, W. V. Wilkerson and George H. Cook, Whitesville.

BROOKE (2)—Delegates, James E. Wise, Follansbee; and W. T. Booher, Sr., Wellsburg. Alternate, Ralph McGraw, Follansbee.

CABELL (11)—Delegates, D. Sheffer Clark, James R. Cook, Robert L. Dunworth, Albert C. Esposito, George J. Hill, Harold N. Kagan, Jack Leckie, M. Bruce Martin, John D. Harrah and Maurice A. Mufson, Huntington; and W. W. Mills, Kenova. Alternates, H. S. Mullens, Kenova; Dennis S. O'Connor, Jack O. Sheppe and Gerald E. Vanston, Huntington.

CENTRAL WEST VIRGINIA (3)—Delegates, Joseph B. Reed, Buckhannon; Yong Don Joo, Summersville; and Roger Paul Bennett, Upperglade. Alternates, Clemente Diaz and Louis W. Groves, Jr., Richwood; and C. R. Davisson, Weston.

EASTERN PANHANDLE (5)—Delegates, William O. Pischnotte, Norman Samuels, Leo H. T. Bernstein, C. Vincent Townsend and L. Walter Fix, Martinsburg.

FAYETTE (3)—Delegates, Carl R. Adkins, Fayetteville; Ivan H. Bush, Jr., and Joe N. Jarrett, Oak Hill. Alternates, Thomas C. Sims, Smithers; Richard M. German, Jr., and W. P. Bittinger, Oak Hill.

GREENBRIER VALLEY (4)—Delegates, Romeo R. Ednacot, Ronceverte; Harvey A. Martin, White Sulphur Springs; Robert K. Modlin, Ronceverte; and Houston B. Moore, Lewisburg. Alternates, Thomas O. Dotson, White Sulphur Springs; Joseph E. Shaver, Ronceverte; and Lee B. Todd, Quinwood.

HANCOCK (4)—Delegates, George S. Kosar, George Naymick, Ray S. Greco and Carlos L. Vasquez, Weirton.

HARRISON (5)—Delegates, Mehmet V. Kalaycioglu, Shinnston; L. Dale Simmons, Reverdy H. Jones, Jr., and Charles S. Harrison, Clarksburg; and Julian D. Gasataya, Lumberport. Alternates, Catalino B. Mendoza, Jr., and Paul E. Gordon, Clarksburg; Victorino D. Chin, Bridgeport; and Douglas E. McKinney and L. H. Mills, Clarksburg.

KANAWHA (19)—Delegates, William D. Crigger, South Charleston; Donald E. Farmer, Dominic J. Gaziano, Robert L. Ghiz, Sherman E. Hatfield, Alfred J. Magee, Carl J. Roncaglione, Pat A. Tuckwiller, John F. I. Zeedick and George R. Callender, Jr., Charleston; Marshall J. Carper, South Charleston; Jean P. Cavender, Jacques Charbonniez and W. Alva Deardorff, Charleston; Ralph J. Holloway, South Charleston; George W. Hogshead, Nitro; J. L. Mangus, John B. Markey and Joseph T. Skaggs, Charleston. Alternates, Adla Adi, Constantino C. Arceo and Mildred M. Bateman, Charleston; R. S. Birckhead, Gauley Bridge; Carrel M. Caudill and Jose M. Celis, Charleston; Donald E. Cunningham, St. Albans; Larry D. Curnutte and John A. B. Holt, Charleston; James T. Hughes and James S. Kessel, Ripley; John V. Merrifield, Dunbar; Ralph H. Nestmann, Robert E. O'Connor and William C. Revercomb, Charleston; and Robert W. Young, Dawes.

LOGAN (4)—Delegates, C. J. Lesaca, Man; Ray M. Kessel, Logan; Thomas P. Long, Man; and Carlos F. DeLara, Logan. Alternates, Leandro Galang, Logan; Jorge J. San Pedro, Man; and I. M. Kruger, Logan.

MARION (5)—Delegates, Joseph T. Mallamo, Joseph D. Romino, Robert S. Mutch, F. W. Mallamo and Robert B. Point, Fairmont. Alternates, William T. Lawson, T. F. Hall II and J. A. Rizzo, Fairmont.

MARSHALL (3)—Delegates, Erol Bastug, David E. Yoho and Andrew J. Barger, Glen Dale. Alternates, Ronald W. Dillow, E. N. Asaad and E. Y. Baysal, Glen Dale.

MASON (2)—Delegates, Aarom Boonsue and Mark Cheng, Point Pleasant. Alternates, David W. Cole and John M. Grubb, Point Pleasant.

McDOWELL (4)—Delegates, Muthusami Kuppusami, Arthur Allen Carr, Freeman L. Johnston and Ray E. Burger, Welch. Alternates, Dante Castrodale, Richard O. Gale, Stephen Mamick and Charles F. McCord, Welch.

MERCER (7)—Delegates, Frank J. Holroyd, Princeton; Sam Milchin, Bluefield, Virginia; Lawrence J. Pace, Princeton; E. M. Spencer, J. E. Blaydes, Jr., and Richard O. Rogers, Jr., Bluefield; and Gordon F. Prescott, Princeton. Alternates, Jess P. Champion, Princeton; T. Keith Edwards, Charles S. Flynn, Edward M. Litz, James E. McGee, Jr., Robert W. Neilson and James Powers, Princeton.

MINGO (3)—Delegates, Robert J. Tchou, Arthur E. Levy and Edward B. Headley, Williamson.

MONONGALIA (12)—Delegates, John L. Fullmer, Stanley J. Kandzari, David Z. Morgan, Roger E. King, Joseph J. Renn III, Ludwig Gutmann, Nathaniel F. Rodman, Jr., Ralph W. Ryan, J. Hugh Wiley, Lawrance S. Miller, William A. Neal and Barbara Jones, Morgantown. Alternates, George A. Curry, Philip M. Sprinkle, Robert L. Smith, K. Douglas Bowers, Jr., R. F. Krause, Richard S. Kerr, Alvin L. Watne, Margaret I. Stemple, Herbert E. Warden, Joe Wesley Rhudy, Isaiah A. Wiles and E. J. Morgan, Morgantown.

OHIO (9)—Delegates, Stephen D. Ward, Harry S. Weeks, Jr., Howard B. Sauder, Robert S. Robbins, Leonidas Castro, Robert R. Weiler, H. L. Saferstein, John P. Griffith, Jr., and Thomas L. Thomas, Wheeling.

PARKERSBURG ACADEMY (8)—Delegates, Lyle D. Vincent, William E. Gilmore, M. D. Aving-

ton, Humberto Escandon and Paul G. Modie, Jr., Parkersburg.

POTOMAC VALLEY (3)—Delegates, David R. Chapman, Carl A. Liebig and Harry F. Coffman, Keyser.

PRESTON (2)—Delegates, Del Roy R. Davis, Kingwood; and Thomas A. Haymond, Masontown. Alternates, John W. Trenton, Kingwood; and Jerome C. Arnett, Rowlesburg.

RALEIGH (7)—Delegates, Joseph A. Maiolo, Prospero B. Gogo, Richard G. Starr, Worthy W. McKinney, John M. Daniel, William D. McLean and Eugene Warvariv, Beckley. Alternates, W. H. Rardin, Nicholas D. Zambos, Grover C. Hedrick, Jr., Lamberto C. Maramba, T. J. Ma-Luf and Richard D. Richmond, Beckley.

SUMMERS (2)—Delegates, Chandra P. Sharma and Buford W. McNeer, Hinton. Alternates, Jack D. Woodrum and M. I. Dababnah, Hinton.

TYGART'S VALLEY (5)—Delegates, Vernon E. Duckwall and H. L. Jellinek, Elkins; A. Kyle Bush and Hu C. Myers, Philippi; and P. C. Tampoya, Grafton. Alternates, J. Marlin Nissley, Philippi; Robert R. Rector, Jerome C. Arnett, Jr., Donald R. Roberts and L. H. Nefflen, Elkins.

WETZEL (2)—Delegates, Lemoyne Coffield and Terry Tallman, New Martinsville. Alternates, Allen M. Dyer, Jr., Pine Grove; and Terrell Coffield, New Martinsville.

WYOMING (2)—Delegates, Frank J. Zsoldos and Ross E. Newman, Mullens. Alternate, George F. Fordham, Mullens.

Reception Committee

KENNETH G. MACDONALD, *Chairman*

C. A. Hoffman
Frank J. Holroyd
Richard E. Flood
David F. Bell, Jr.
John J. Mahood
Joseph A. Smith

Robert L. Ghiz
Robert W. Lowe
Robert R. Weiler
Carl J. Roncaglione
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L. J. Pace
Athey R. Lutz
John A. B. Holt
James E. McGhee, Jr.
H. Summers Harrison

Official Program
AUXILIARY
to the
West Virginia State Medical Association
53rd Annual Meeting
THE GREENBRIER
White Sulphur Springs
August 24-27, 1977

WEDNESDAY AFTERNOON
August 24

2:30—First Session of the House of Delegates, West Virginia State Medical Association (Chesapeake Hall).

Address by John H. Budd, M.D., President, American Medical Association.

4:00—Pre-Convention Board Meeting, Mrs. J. L. Mangus, President, presiding (Fillmore-Van Buren Rooms).

WEDNESDAY EVENING

6:30-7:30—President's Reception for Honored Guests (Old White Patio).

THURSDAY MORNING
August 25

9:00—Formal Opening of the 110th Annual Meeting of the West Virginia State Medical Association (Theater).

"The Thomas L. Harris Address"

The Honorable John D. Rockefeller IV, Governor of West Virginia.

(Auxiliary Members are Invited to Attend).

9:45—Formal Opening of the Convention, Mrs. J. L. Mangus, President, presiding (Fillmore-Van Buren Rooms).

Invocation—Mrs. J. A. B. Holt.

Pledge of Loyalty—Mrs. J. A. B. Holt.

Introduction of Honor Guests.

Presentation of John J. Mahood, M.D., President, West Virginia State Medical Association.

Introduction of Convention Co-Chairmen—Mrs. A. G. Capinpin and Mrs. Robert E. O'Connor.

Roll Call of Delegates—Mrs. Thomas J. Janicki.

Convention Rules of Order—Mrs. M. Bruce Martin.

Treasurer's Report—Mrs. Charles S. Harrison.

In Memoriam—Mrs. Robert D. Hess.

Credentials and Registration—Mrs. G. A. Shawkey and Mrs. Phillip W. Hall, Co-Chairmen.

Keynote Address—Mrs. Chester L. Young, President, American Medical Association Auxiliary, Inc.

Recommendations from Pre-Convention Board Meeting—Mrs. J. L. Mangus.

New Business and Announcements.

Report of the Nomination Committee, First Reading—Mrs. Robert R. Weiler.

Election of 1978 Nominating Committee.

Reports of Officers and Standing Committee Chairmen (These will not be read, but are published in the Annual Reports' Book).

Presentation of Regional Directors:

Eastern Region—Mrs. Charles E. Andrews.

Northern Region—Mrs. Harry S. Weeks, Jr.

Western Region—Mrs. Gary G. Gilbert.

Southern Region—Mrs. T. Keith Edwards.

Central Region—Mrs. Joseph A. Smith.

Recess.

THURSDAY AFTERNOON

2:30—Bridge (Trellis Lobby). Hostess, McDowell County, Mrs. A. J. Villani, Chairman.

FRIDAY MORNING
August 26

8:00—Past President's Breakfast, Mrs. Robert R. Weiler, Immediate Past President, presiding (Virginia Room).

9:45—Second General Session—Mrs. J. L. Mangus, presiding (Fillmore-Van Buren Rooms).

Introduction of Honor Guests.

Roll Call of Delegates—Mrs. Thomas J. Janicki.

Report of Reading Committee.

Report of Convention Committees:

Finance—Mrs. J. Dennis Kugel.

Credentials and Registration—Mrs. G. A. Shawkey and Mrs. Phillip W. Hall, Co-Chairmen.

Press and Publicity—Mrs. John E. McKenzie.

Presentation of AMA-ERF Awards—Mrs. Joseph Gilman, State Chairman.

Address—Mrs. Linus W. Hewit, President, Auxiliary to the Southern Medical Association.

Unfinished Business.

Report of the 1977 Nominating Committee, Second Reading—Mrs. Robert R. Weiler.

Election of Officers.

Installation of Officers—Mrs. Chester L. Young, President, American Medical Association Auxiliary, Inc.

Presentation of President's Pin and Gavel—Mrs. J. L. Mangus.

Presentation of Past President's Pin—Mrs. Robert R. Weiler.

Inaugural Address—Mrs. Joseph T. Mallamo.

Announcements.

Adjournment.

FRIDAY AFTERNOON

2:00—Golf Tournament—Hostess, Kanawha County, Mrs. James T. Hughes, Chairman.

Tennis Tournament—Mrs. Joseph A. Maiolo, Chairman.

FRIDAY EVENING

8:00—Dinner-Dance, Music by "Gingerbread." Hostess: Cabell County, Mrs. Nazem Abraham, Chairman (Colonial Hall).

SATURDAY MORNING

August 27

10:00—Post-Convention Conference and Board Meetings—Mrs. Joseph T. Mallamo, President, presiding (Fillmore-Van Buren Rooms).

SATURDAY AFTERNOON

2:30—Second and Final Session of the House of Delegates, West Virginia State Medical Association (Chesapeake Hall).

Presidential Address—John J. Mahood, M.D.

Installation of Joseph A. Smith, M.D., as 1977-1978 President of the West Virginia State Medical Association.

(Auxiliary Members are Invited to Attend).

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring the Officers of the West Virginia State Medical Association (Colonial Hall Terrace).

SCIENTIFIC EXHIBITS

DIVISION OF UROLOGY

West Virginia University Medical Center

"TREATMENT OF LOCALIZED CARCINOMA OF THE PROSTATE WITH RADIOACTIVE IODINE^{125}." This exhibit demonstrates the surgical technique of treating localized carcinoma of the prostate with Interstitial Iodine^{125} combined with bilateral pelvic lymphadenectomy. The exhibit also explains the advantages of this technique over external radiation therapy and radical prostatectomy.

Stanley J. Kandzari, M. D., Associate Professor.

DRS. A. W. GOODWIN, J. K. SEXTON, W. G. HAYES, J. L. LEEF; AND C. F. MENTZ, R. T., CHARLESTON

"A COUNT RATE METHOD FOR CALCULATING LEFT VENTRICULAR EJECTION FRACTIONS FROM GATED IMAGES." Images of the heart in end systole and end diastole in a sixty-degree left anterior oblique position were obtained and recorded on a series 150 data system. Using irregular areas of interest, total counts and matrix areas were obtained for both the end systole and end diastole. Background per matrix areas was determined by taking an average background count in the myocardial region, adjacent to the left ventricular chamber, from the end systole image. Using the background per area and the number of areas for the end systole and end diastole, the counts in the left ventricle were corrected for each image. At this point we substituted counts in the left ventricle for volume and were able to calculate the left ventricular ejection fraction by using a standard volume formula. Technetium labeled electrolytic human serum albumin was used in all cases, and data accumulated during 400 to 600 R-R intervals. The results were comparable to left ventricular ejection fractions obtained via cardiac catheterization. The nuclear count rate ejection fraction is easily obtained and has proved to be very useful in treatment planning. We can more easily compare studies with previous gated scans and compare pre- and postnitroglycerin ejection fractions.

Doctors Goodwin, Sexton, Hayes and Leef.

GEORGE L. LUCAS, M. D.

Madison, Wisconsin

"EXAMINATION OF THE ACUTELY INJURED HAND." This exhibit was prepared by Doctor Lucas for the American Association for Hand Surgery and is designed as a teaching exhibit for family practitioners, interns, residents, general surgeons, etc. The exhibit depicts the stages of examination and evaluation of the acutely injured hand by the use of enlarged color photographs and color line drawings.

THE MYERS CLINIC—BROADDUS HOSPITAL

"CROHN'S DISEASE." This exhibit presents an overview of Crohn's Disease (regional enteritis), giving history, incidence, sites of involvement, pathophysiology and therapy. Case presentations are given with gross and photomicrographic pictures.

A. Kyle Bush, M.D., Department of Surgery, and J. Richard Crawford, Director of Photography.

NATIONWIDE INSURANCE—MEDICARE

"MEDICARE INFORMATION." Nationwide invites you to obtain the latest literature concerning administration of the Medicare Program. Don Harper, Randy Swecker and Betty Rickenbacker will be present to answer your questions.

Don F. Harper, District Medicare Manager; Randy Swecker, District Medicare Manager; and Betty Rickenbacker, Field Service Supervisor.

SOUTHERN MEDICAL ASSOCIATION

"SOUTHERN MEDICAL ASSOCIATION CANCER EDUCATION SERVICE DIAL ACCESS SYSTEM." The SMA Cancer Information Center Dial Access System makes available, without charge, the most recent diagnostic and therapeutic information on specific neoplastic disease problems. Physicians, dentists, nurses and students can use the service by dialing the appropriate telephone number and requesting, by number, any of the topics listed in the catalogue available at the exhibit.

Roy B. Evans, Jr., Executive Director.

UNITED STATES AIR FORCE

"U. S. AIR FORCE HEALTH PROFESSIONS RECRUITING." Opportunities for physicians to practice their professions with the U. S. Air Force Medical Service Corps. If you're a physician who at one time or another has considered a change, then take a look at the Air Force facilities and programs. We in the Air Force believe ours is one of the finest health care programs in the nation, and that it offers many unusual professional as well as personal opportunities. Additionally, our health care

team is comprised of individuals dedicated to the ideals which made America great, and to the continuation of 200 years of freedom. In short, we feel it is a great way of life and that it offers many advantages to the modern physician.

Theodore (Ted) H. Williams, Captain, USAF, MSC; and Charles R. (Ron) Hutton, MSgt, USAF.

WEST VIRGINIA DEPARTMENT OF WELFARE

"LONG-TERM CARE QUALITY/COST CONTROL SYSTEM." *Definition*: The profiling of facility services and patient services and application of professional standards and criteria for the appropriateness and quality of services. *Purpose*: To reimburse Long-Term Care (LTC) facilities on a cost-related basis applying cost controls through cost accounting principles for those services actually provided to and needed for the patient. *Methodology*: A systemized information base which allows the agency to develop profiles of LTC services and apply a review process for its appropriateness, quality, efficiency, effectiveness and cost.

Dorris L. Scott, Coordinator, Long-Term Care Unit; and Dora Grisinger, R.N., Supervising Nurse, LTC.

WEST VIRGINIA MEDICAL INSTITUTE, INC.

The Medical Institute, an organization of West Virginia physicians, will offer a videotape presentation explaining the role of physicians in medical care evaluation studies.

Harry S. Weeks, Jr., M.D., President, and Mrs. Betty C. Kirkwood, Executive Director.

WEST VIRGINIA STATE DEPARTMENT OF HEALTH

Bureau of Venereal Disease Control and Bureau of Health Statistics

"1. PPNG, 2. IN AND OUT." 1. This VD display emphasizes the entrance of the newly recognized and very dangerous strain of penicillinase-producing neisseria gonorrhea into the United States and provides current medical information on managing the PPNG problems in the practitioner's office and the community. An enlarged photograph depicting the one PPNG specimen isolated in West Virginia will be on hand. Other appropriate venereal disease management material will be available. 2. The display will include samples of the revised multi-copy birth and death certificate forms to be put into use on January 1, 1978. The latest documents containing health manpower and health facilities data also will be on display.

Ronald G. Bryant, Public Health Advisor.

ANNUAL REPORTS

Insurance Committee

Your Insurance Committee is pleased to report the continued high standard of performance of our State Association Group Insurance Program. Carefully assembled over the past 29 years, our Program offers eight separate plans, each responding to a vital personal need. Our Program offers a coordinated plan of coverages at group rates.

As a part of this year's report, we are publishing a review of the plans and recommend you check your own personal program to see that it conforms to today's requirements. Each plan is described in brochures available through our Administrator.

THE PROGRAM:

Monthly Income Protection—"Long-Term Sick Leave Protection" is an essential part of every member's insurance program. The Association's Plan pays a regular monthly income when the insured member is disabled. It is designed for serious long-term sickness or injury. You may apply for benefits up to $2,000 a month.

Office Overhead Insurance—Usually it is neither practical nor desirable to close an office when sickness or injury interrupts your practice. Office Overhead Insurance covers the regular operating costs of a member's office—including salaries of office employees, rent, utilities, and other normal operating expenses. Premium for this policy is tax deductible. You may apply for benefits up to $3,500 a month.

Family Major Hospital Insurance—Unplanned-for hospital confinement can be financially disastrous. Family Major Hospital Insurance is designed for major hospital expenses. The new plan offers up to a limit of $30,000 including bed and board allowance of $60 a day.

Hospital Money Plan—This plan offers a schedule of benefits up to $100 a day for each day of hospitalization for a member and spouse. Dependent children may be insured up to $50 a day. This plan is designed to provide the "over and above" expenses that inevitably attend today's hospital confinement.

Family Plan Term Life Insurance—In units of $10,000, you may apply for $50,000 of term life insurance. At your option, insurance on your wife and children for lesser amounts.

Jumbo Accidental Death and Dismemberment Insurance—This plan provides up to $100,000 for Accidental Death and Dismemberment. Coverage is 24 hours a day—year around . . . at home or away . . . on or off the job . . . worldwide. Among other coverages, you are protected as a passenger for regular commercial airline travel.

Coordinated Investment Service—Specifically designed for HR-10, this plan offers mutual funds, fixed or variable annuities, and split funds.

Group Professional Liability Insurance—The Professional Malpractice Package Plan offers up to $1,000,000 protection, including umbrella excess limits over auto and personal liability coverages.

COMPUTER AUDIT:

Most members have had their life insurance programmed. In the event of death, the future obligations are anticipated and a reasonable degree of financial security is provided for your family. Of equal importance is an adequate program of health insurance.

The Association's Computerized Audit for group accident and health coverages has been in operation for several years. This year, our Administrator is undertaking a vital additional step—the personal delivery of the audit for review with each member. The importance of this step is that essential revisions in your program will be made and your program adjusted to today's needs. In your own interest, take time to bring your health coverages in line with current requirements and today's cost of living.

OTHER ACTIVITY:

During the past year, members were invited to participate in the Association's new Office Overhead policy. The new plan offers up to $3,500 a month in benefits.

The Family Major Hospital Plan was substantially upgraded. Benefits were increased to conform to continuing upward trend in hospital costs.

The Aetna Life & Casualty Company's Professional Liability Program for Association members is now in its fifth year. The program, at present, appears to be succeeding in most areas. While the numbers of claims and average settlement costs continue to rise, the total cost of

premiums in West Virginia rose modestly in 1977. The factors affecting insurance costs, over which there is some control, continue to be loss prevention efforts and remedial tort legislation.

In the first quarter of 1977, there were 83 cases pending. The total dollars paid and reserved on these cases amounted to $1,905,900—an average of $22,962 per case.

The one factor which has most affected the amount paid on claims has been the District Claim Review Panel. The reviews have increased Aetna's expertise in medical-legal issues and medicine per se. They have improved Aetna's ability to protect the physician's interests. At the same time, they give the physicians participating on the panels first-hand experience in the causes of malpractice claims.

There are now five panels operating with a sixth one contemplated. Of the 20 cases reviewed, eight have been resolved. Three were closed without payment. Of the remaining five, $109,000 less was paid than had been expected prior to the panel review. This represents a substantial savings.

In addition to the panel review, there have been other efforts to keep the physicians informed of the problems unique to medical malpractice. In the past year, 21 of the local medical societies have been addressed. Aetna met with several specialty groups and provided loss experience, rating information and other data germane to their areas of medicine.

Because most (95 per cent) of the doctors now participate in the program, the accumulated data now available on West Virginia's experience are more credible and specific. The physician who takes advantage of this information and uses it in his day-to-day practice is in a much better position to avoid malpractice litigation than he was a year or so ago.

Remedial tort legislation remains a serious problem. West Virginia is among the few remaining states that have failed to enact any reforms in the area of medical malpractice. Charles Lewis, Executive Secretary of the Medical Association, made a strong effort to get the legislature to consider a bill agreed to, at least in principle, by doctors, lawyers and insurance industry interests. The effort failed. Legislation of this type is not going to occur in West Virginia unless (1) the physicians lend their grassroots support or (2) an insurance crisis, or threat thereof, occurs. There are many areas in the practice of medicine where statutory clarification would benefit both patient and doctor. Until reforms occur in West Virginia, the quality of health care as well as cost and availability of insurance will be needlessly jeopardized.

Respectfully submitted,

Lyle D. Vincent, M. D.,
Chairman
John T. Chambers, M. D.
R. U. Drinkard, M. D.
L. Walter Fix, M. D.
F. Perry Greene, Jr., M. D.
H. Summers Harrison, M. D.
James A. Heckman, M. D.
Upshur Higginbotham, M. D.
C. A. Hoffman, M. D.
Kenneth G. MacDonald, M. D.
A. Thomas McCoy, M. D.
Buford W. McNeer, M. D.
C. Vincent Townsend, M. D.

June 21, 1977

Medical Aspects of Sports Committee

The major objective of the Committee on Medical Aspects of Sports for 1977 was to investigate and arrive at a meaningful statement as regards our recommendation for preparticipation physical examination and a statement as regards our recommendations for the prevention of heat illness. This has been accomplished to our satisfaction and the Committee, therefore, submits the following report:

All athletes competing in any organized athletic program should have a yearly history and physical examination. Minimal standards would be a thorough, complete history and physical examination prior to engaging in competition at the seventh-grade and tenth-grade levels. Screening physical examinations would be acceptable at yearly intervals thereafter.

Laboratory studies and x-rays as indicated by the history and physical examination should be obtained, evaluated, and acted upon accordingly. Routine hemoglobin and hematocrit levels for postmenarche females should be done yearly. Sickle cell tests for black athletes are recommended.

It must be stressed that physicians should be able to interpret their findings recognizing conditions which are considered disqualifying as well as those conditions which should be cleared by a consulting specialist prior to allowing participation. Several specific physical abnormalities require explanation to the athlete or to his legal guardian to the extent that participation is not recommended, but will be allowed after a waiver is signed.

The following conditions should be considered disqualifying for contact athletics:

A. Neurologic
   1. Large postcraniotomy cranial defects.
   2. Inadequacy of neuromuscular system, congenital or acquired, that is incompatible with the contact or skill the sport demands.

B. Ophthalmologic
   1. Congenital glaucoma.
   2. Retinal detachment.

C. Hematologic
   1. Coagulation defects.
   2. Bleeding abnormalities.

D. Cardiovascular
   1. Active rheumatic fever and for one year after cessation of carditis.
   2. Significant cardiac enlargement.
   3. Significant valvular disease or septal defect.
   4. Hypertension on any organic basis.

E. Abdominal
   1. Enlargement of liver, spleen, or kidney.
   2. Significant uncorrected hernia.

F. Metabolic
   1. Poorly controlled diabetes.
   2. Hyperthyroidism.
   3. Hyperparathyroidism.
   4. Cushing's syndrome.

G. Musculoskeletal
   1. Osteomyelitis, acute or chronic.
   2. Conditions resulting in generalized or significant localized skeletal weakness.
   3. Previous trauma with either excessive joint laxity or significant restriction in joint motion.
   4. Spondylolisthesis, Grade II or greater.

The following conditions must be cleared by a consulting specialist. Athletes with such conditions are considered disqualified until such consultation is obtained clearly stating either that disqualification stands or that the athlete can participate safely.

A. Cardiovascular
   1. Any cardiac murmur.
   2. Hypertension.

B. Neurologic
   1. Epilepsy.

C. Infectious disease
   1. Infectious mononucleosis within the past six months.
   2. History of tuberculosis.

D. Musculoskeletal
   1. Any persistent or recurrent joint pain or effusion.
   2. Scoliosis or any other significant spinal deformity.
   3. Significant leg-length discrepancy.
   4. Previous spinal surgery.
   5. Previous spinal trauma, fracture or dislocation.
   6. Spondylolisthesis, Grade I.
   7. Spondylolysis.

E. Any athlete treated by other physicians over the past six months should have a medical release by the treating physician before being allowed to participate.

Athletes with the following conditions should be encouraged not to play and it must be made clear that, medically, it is recommended that they not participate. They can, however, be allowed to participate following the signing of a waiver by the athlete, if legally an adult, or by his parent or legal guardian.

1. Absence of one eye, functional or otherwise.
2. Absence of one of paired vital organs such as kidney or testes.
3. Large bone cyst.
4. Previous joint trauma with residual laxity, mild to moderate, which may predispose to degenerative joint disease.

It is obvious that this list can be and will be added to in the future; however, we feel this to be a satisfactory base line from which to operate.

It is the Committee's recommendation that team physicians, trainers, or other paramedical personnel involved in the care of athletes, as well as coaches, educate themselves as regards the treatment of, but more importantly the prevention of, heat illness. They should be able to recognize the three stages and the dire consequences of failure to treat each stage. They must realize that heat stroke carries a rather high mortality rate and that this condition is preventable.

They should be thoroughly familiar with preventive measures such as daily body weight charts, proper acclimatization, the use of a sling psychrometer and the provision of adequate fluid replacement. They must be aware of the manner in which practice sessions should be modified or cancelled according to sling psychrometer readings.

Physicians, trainers, coaches and the teaching profession in general throughout the state are

hereby assured that this Committee will do whatever possible to aid in education and to provide proper evaluation and treatment of athletes in organized athletic programs throughout our state.

Respectfully submitted,

K. Douglas Bowers, Jr., M. D.,
Chairman

May 10, 1977

Medical Education and Hospitals Committee

The activities of the Committee were confined during the 1976-77 year to the area of accreditation of continuing medical education programs.

A total of six continuing medical education site surveys resulting in the provisional or full accreditation or re-accreditation of eight hospitals, specialty societies and organizations has been conducted through the Committee on Medical Education and Hospitals since August, 1976.

Four of the six CME surveys were re-surveys. The two new surveys were for Fairmont Clinic, conducted on November 17, 1976, and the Mid-Ohio Valley Continuing Medical Education Committee, a joint program of Camden-Clark Memorial Hospital, St. Joseph's Hospital Center, and the Parkersburg Academy of Medicine, conducted in Parkersburg on March 30-31, 1977. Both programs were granted a two-year provisional accreditation for a newly developing program by the Committee (full accreditation is for three years).

Members of the survey teams were Drs. Hu C. Myers of Philippi, Chairman, and Creel S. Corwell, Jr., of Clarksburg, for the Fairmont Clinic; and Drs. R. James Yates of Beckley, Chairman, and Robert D. Hess of Clarksburg for the Parkersburg survey.

One physician only, usually the chairman of the previous survey, conducts a re-survey. The four re-surveys held since last August, the dates, and the physicians conducting the surveys follow:

St. Mary's Hospital, Huntington, February 16, 1977, Dr. T. Keith Edwards of Bluefield; West Virginia Academy of Ophthalmology and Otolaryngology, April 25, 1977, The Greenbrier, White Sulphur Springs, Dr. Mary Lou Lewis of Charleston; West Virginia Chapter of the American College of Surgeons, May 5, 1977, The Greenbrier, White Sulphur Springs, Dr. Eugene McClung of Lewisburg, and Beckley Appalachian Regional Hospital, June 1, 1977, Dr. Herbert H. Pomerance of Charleston.

All of the above, with the exception of the West Virginia Academy of Ophthalmology and Otolaryngology, were granted full, three-year re-accreditation by the Committee. The survey report for the Academy has not yet been reviewed by the Committee.

It is interesting to note that the re-survey of Beckley Appalachian Regional Hospital on June 1 was the third survey for that hospital, the first hospital to be surveyed (May 23, 1973) under the State Medical Association's accreditation program.

Since May of 1973, a total of 11 hospitals and four specialty societies and organizations has been surveyed. Including re-surveys, a total of 18 site surveys, with 17 individual state physicians serving as team members, has been conducted. Four hospitals and two specialty societies have been re-surveyed.

The other hospitals and specialty societies which were surveyed prior to August, 1976, are Veterans Administration Center, Martinsburg; Charleston Area Medical Center, West Virginia Obstetrical and Gynecological Society, Broaddus Hospital and Myers Clinic, Philippi, and Ohio Valley Medical Center and Wheeling Hospital, Wheeling.

Following is the complete list of original hospital and group surveys (with re-surveys not shown) since the beginning of the accreditation program:

Beckley Appalachian Regional Hospital, May 23, 1973.

Veterans Administration Center, Martinsburg, March 26, 1974.

West Virginia Academy of Ophthalmology and Otolaryngology, April 18, 1974.

West Virginia Chapter of the American College of Surgeons, May 2, 1974.

St. Mary's Hospital, Huntington, November 20, 1974.

Charleston Area Medical Center, January 15-16, 1975.

Broaddus Hospital-Myers Clinic, Philippi, December 3, 1975.

Ohio Valley Medical Center and Wheeling Hospital, Wheeling, February 11-12, 1976.

Fairmont Clinic, November 17, 1976.

Mid-Ohio Valley Continuing Medical Education Committee (Camden-Clark Memorial Hos-

pital, St. Joseph's Hospital Center and Parkersburg Academy of Medicine), March 30-31, 1977.

The Subcommittee on Accreditation is charged with reviewing survey team reports of programs within the state seeking accreditation and recommending approval or disapproval to the entire Committee on Medical Education and Hospitals. The members of the subcommittee are Drs. T. Keith Edwards of Bluefield, George M. Kellas of Wheeling, and Mary Lou Lewis of Charleston.

A mail ballot is used for members of the Committee to approve or disapprove the recommendation of the survey team and the subcommittee. A summary of the team report accompanies each mail ballot.

Hospitals and groups accredited by the State Medical Association, which serves as an accrediting body for the American Medical Association, are eligible to grant credit in Category I of the AMA's Physician's Recognition Award for their CME programs.

Respectfully submitted,

Herbert H. Pomerance, M. D.
Chairman

June 27, 1977

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Boone	A. E. Glover	Madison	Harold H. Howell	Madison	3rd Wed.
Brooke	Rogelio L. Velarde	Follansbee	James E. Wise	Follansbee	
Cabell	Robert L. Dunworth	Huntington	James R. Cook	Huntington	2nd Thurs.
Central West Virginia	George T. Hoylman	Gassaway	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	Norman Samuels	Martinsburg	Wm. O. Pischnotte	Martinsburg	2nd Wed.
Fayette	Ivan H. Bush, Jr.	Oak Hill	Chuan H. Lee	Montgomery	1st Wed.
Greenbrier Valley	T. O. Dotson	White Sul. Spgs.	Houston B. Moore	Lewisburg	2nd Wed.
Hancock	George S. Kosar	Weirton	Carlos L. Vasquez	Weirton	3rd Tues.
Harrison	W. E. Williamson, Jr.	Bridgeport	Louis C. Palmer	Bridgeport	1st Thurs.
Kanawha	Sherman E. Hatfield	Charleston	Carl J. Roncaglione	Charleston	2nd Tues.
Logan	Leandro Galang	Logan	Carlos F. DeLara	Logon	2nd Wed.
Marion	Joseph D. Romino	Fairmont	John A. Rizzo	Fairmont	Last Tues.
Marshall	David E. Yoho	Glen Dale	Erol Bastug	Glen Dale	1st Tues.
Mason	Young Choi	Pt. Pleasant	Montrie Chaksupa	Pt. Pleasant	4th Tues.
McDowell	Arthur Allen Carr	Welch	Muthusami Kuppusami	Welch	2nd Wed.
Mercer	Roy R. Raub	Princeton	David F. Bell, Jr.	Bluefield	3rd Mon.
Mingo	Wm. L. Mossburg	Williamson	Edward B. Headley	Williamson	2nd Wed.
Monongalia	James D. Martin	Morgantown	Barbara Jones	Morgantown	1st Tues.
Ohio	Fernando G. Giustini	Wheeling	Thomas E. Chvasta	Wheeling	4th Tues.
Parkersburg Academy	Paul G. Modie, Jr.	Parkersburg	Robert F. Gustke	Parkersburg	1st Thurs.
Potomac Valley	D. F. Bensenhaver	Petersburg	David R. Chapman	Keyser	2nd Wed.
Preston	Peter S. Prentice	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	William D. McLean	Beckley	Joseph A. Maiolo	Beckley	3rd Thurs.
Summers	E. L. Jimenez	Hinton	Chandra P. Sharma	Hinton	3rd Mon.
Tygart's Valley	H. L. Jellinek	Elkins	A. Kyle Bush	Philippi	3rd Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	Chas. P. Watson	New Martinsville	Monthly
Wyoming	Frank J. Zsoldos	Mullens	George F. Fordham	Mullens	Quarterly

The West Virginia Medical Journal

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Multiple Myeloma, A 'B' Cell Blood Dyscrasia

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GARY MARCUS, M. D.
Associate Pathologist, Medical Center of Beaver Falls, Pennsylvania.

Multiple myeloma is a "B" cell dyscrasia. It is the purpose of this paper to present a general introduction to the subject of multiple myeloma and the results of the immunological and morphological studies obtained in 44 cases studied at West Virginia University Hospital from 1972-74.

The immune system is functionally divisible into two parts: the "B" and the "T" cell systems. Contact with antigenic substances may activate either or both divisions of the system. The antigenic stimulation of an immunological competent vertebrate may, therefore, result in the synthesis of humoral antibody against the antigen produced by the "B" or Bursa cells or the development of cellular immunity to the antigen for which the thymus or "T" cells are responsible, or most likely both types of response.

Multiple myeloma is a disease of old age. Most cases are found in the age group 70-80 and no confirmed case has been reported before 40. We know very little of the etiology of multiple myeloma; however, irradiation has been considered a factor. Since hereditary factors play a real part in the development of malignant plasma cell disease, the DNA must in some way be involved.

Waldenstrom defines myeloma as a "malignant proliferation of plasma cells chiefly located in the bone marrow, but often in the later stages spread throughout the body (leukemic phase)."[13] It is possible that it would be more appropriate to use the name *plasmacytosis maligna* in contradistinction with "benign" plasmacytosis seen in many conditions. Osserman[1] prefers the term "plasma cell dyscrasia" that is synonymous with "monoclonal gammopathy," "dysgammaglobulinemia" and "paraimmunoglobinopathy," all of which have as a common feature the excessive proliferation of a *single clone* of immunoglobulin-producing cells. This usually results in the overproduction of a single immunoglobulin which appears as a homogeneous "spike" on electrophoresis of serum or urine proteins.

Plasma cell dyscrasia can be classified into two main groups: (1) symptomatic plasma cell dyscrasia, and (2) asymptomatic or occult plasma cell dyscrasias.[2] A certain proportion of the asymptomatic cases will progress to overt myeloma.

Myeloma means marrow tumor. The incidence has apparently increased in recent years from two to three per 100,000, more or less the same frequency as Hodgkin's disease and chronic lymphocytic leukemia.[3] In recent statistics men and women are equally affected.[4] It also has been reported recently that in the New York area blacks show a higher incidence than whites.[5]

Clinical Features

In many cases the clinically overt symptomatic state of myeloma is preceded by a significant

TABLE 1

Selected examples of gamma globulin level mg./dl gamma globulin	*versus*	*% of plasma cells in the bone marrow*
12,600		10%
3,300		100%
2,100		50%
11,500		90%
5,800		100%
2,150		100%
2,100		50%
6,250		37%

asymptomatic or presymptomatic period ("premyeloma").[6] It has been found on routine annual examination by the finding of an "M" peak, increased sedimentation rate, hypercalcemia or unexplained proteinuria.

Skeletal pains are the presenting and predominant manifestations when myeloma becomes symptomatic. Multiple osteolytic ("punched out") lesions are apparent on initial x-ray examination. In occasional cases, myeloma presents as a single skeletal lesion designated as plasmocytoma. Generally no globulin abnormalities are seen in these cases. Increased susceptibility to bacterial infections, particularly pneumococcal pneumonia, is exhibited in many cases of myeloma due to impaired capacity for antibody formation.[7] Bleeding is present in some patients, probably due to interaction of clotting factors (I, II, V, VII and platelets) with the specific M-type of globulins. Cryoglobulins and pyroglobulins are present in some cases. The former produce Raynaud-type of symptoms.

Hyperviscosity syndrome[8] is caused by the increase in the subfraction gamma 3 of the gammaglobulin. The presence of the so-called myeloma kidney and its relation to urinary Bence-Jones protein has been reviewed recently and it appears to be quite evident that several factors in addition to Bence-Jones proteinuria contribute to renal damage in myeloma. Amyloidosis[9] and its relation to the presence of light chains has been reconsidered recently. A particular association of amyloidosis with IgD is suggested by the frequency of this manifestation in IgD myeloma.

Occasionally a diagnosis of plasma cell leukemia[10] is made. The patient shows hepatosplenomegaly and a leukocyte count in excess of 50,000/ul containing over 50 per cent plasma cells. It is interesting that both of the reported cases of IgE myeloma[11] displayed the pattern of plasma cell leukemia, and that there are two known cases with IgD globulins within this clinical pattern.[12]

Laboratory Features

Bone marrow aspiration or biopsy is essential for the documentation of myeloma. An increased number of plasma cells and abnormal forms has been found in essentially all cases, although more than one biopsy is necessary.[13] The marrow typically contains at least 5 to 10 per cent of plasma cells, many of which are large, immature and multinucleated. When the proportion of plasma cells exceeds 15 to 20 per cent, and particularly when clusters or sheets of plasma cells with a large proportion of immature and abnormal forms are found, the diagnosis of myeloma is almost certain.

In peripheral blood findings, virtually all cases of myeloma exhibit anemia at the time of diagnosis or subsequently as the disease progresses. The anemia is usually normocytic and normochronic,[14] but may be macrocytic and associated with megaloblastic bone marrow.[15] Polycythemia has been found in association with overt myeloma as well as asymptomatic plasma cell dyscrasia in a small number of patients.[16]

Rouleaux formation is observed in the peripheral blood and marrow smears, and *in vivo* erythrocyte aggregation ("sludge blood") is demonstrable in the majority of cases of myeloma, probably due to coating of the erythrocytes with M-type proteins. The sedimentation rate is markedly elevated in most cases. Coombs test is negative. Leukocyte and platelet counts are usually within normal limits. Severe leukopenia and thrombocytopenia is noticed in 30 per cent of cases, the precise mechanism responsible being unknown. Serum and urinary protein abnormalities are demonstrable in over 99 per cent of cases of overt myeloma when appropriate studies are made. [17,18]

Other laboratory findings frequently reveal azotemia. Hyperuricemia may accompany renal failure or may occur in the absence of azotemia. Hypercalcemia also occurs frequently. The alkaline phosphatase is normal or slightly elevated.

Differential Diagnosis

In patients with advanced disease the diagnosis is not difficult. Osteolytic lesions, more than 10 per cent of abnormal cells in the bone marrow—especially when they appear forming aggregates, and homogeneous M-type protein component in the serum and/or Bence-Jones proteinuria, are characteristic.

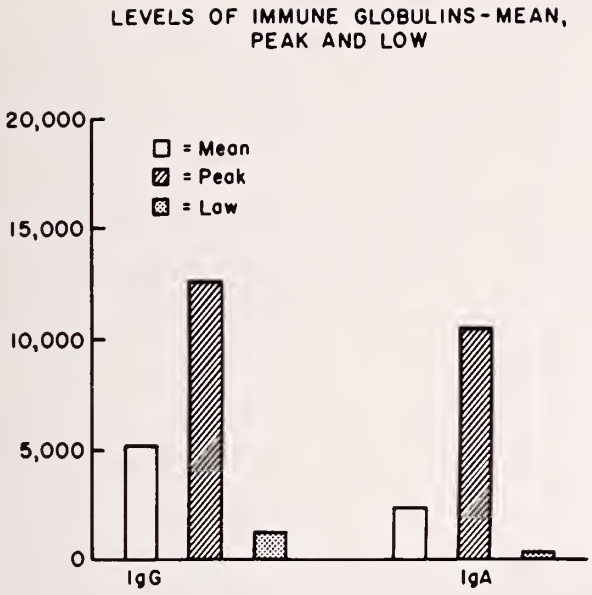
The differentiation of multiple myeloma from "benign" monoclonal gammopathy may be impossible when the abnormality is first discovered.

Metastatic carcinomas of the breast, prostate or lung may mimic multiple myeloma and on occasion they may occur together.

Plasmacytosis may be found in the bone marrow of patients with hepatitis, cirrhosis of the liver, Hodgkin's disease, and in neoplasia.

Treatment, Course, and Prognosis

It is not the purpose of this presentation to discuss at length various courses of treatment; however, it should suffice to mention that



Graph 1

melphalan L-phenylalanine mustard (Alkeran) and cyclophosphamide (Cytoxan) are apparently the two most effective drugs in the long-term management of myeloma.[19]

With the present-day therapeutic regimens, significant degrees of improvement or remission can be produced in at least 60 to 70 per cent of all patients with multiple myeloma. Duration of remissions has ranged from six months to seven years, with a mean of three years.

Since the availability of melphalan and cyclophosphamide, monocytic leukemia[20,21] has developed as a terminal event in a small but significant number of cases of multiple myeloma. So-called stem-cell leukemia has also been reported.[22]

Case Studies

From the period 1972-74, 44 cases of multiple myeloma are documented from the medical records of West Virginia University Hospital by bone marrow and immunodiffusion studies. The morphologic bone marrow picture, type of serum immunoglobulin, presence or absence of urinary Bence-Jones protein, and results or urine electrophoresis are presented. The type and percentage of cases with each type of globulin are presented in Graph. 1.

Urine Bence-Jones proteins using conventional methods (acidified urine and heating) were found in only 17.5 per cent of patients studied with myeloma (82.5 per cent of these known myeloma patients had negative tests for Bence-Jones protein). Whereas, the same patients studied by urinary protein electrophoresis showed abnormal gamma or beta peaks in 70 per cent of the cases (Table 3). Of the 44 cases of myeloma, 34 had Bence-Jones protein performed.

All 44 cases had serum immunodiffusion performed. No bone marrow involvement was found in 10 of the cases. Of these, six were IgG myeloma, three were IgA myeloma, and one was a light-chain secretor.

No reliable correlation was found between the degree of elevation of the immunoglobulin and the percentage of replacement of myeloma cells in the bone marrow (Table 2). Also, the type of immunoglobulin and a specific morphologic pattern did not correlate. Russell bodies, Mott cells, and flame cells were seen regardless of the immunoglobulin type present. One consistent finding in 97.8 per cent of the cases (all but one) was an elevation of one globulin class: all other classes were either normal or low. One case had elevated IgG and IgA.

Interestingly, the one patient who was a nonsecretor had a total replacement of marrow by plasma cells. So did one of the two patients with light-chain secretion only. Both patients with light-chain disease had positive Bence-Jones protein, while one of nine IgA had positive Bence-Jones protein, and three of 23 IgG patients had positive Bence-Jones proteins (Table 2). The

TABLE 2

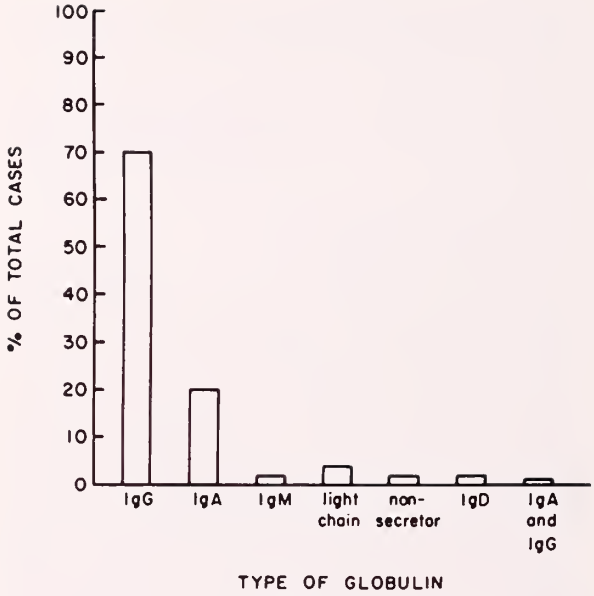
Bence-Jones Proteinuria and Type of Immune Globulin

	Negative Bence-Jones	*Positive Bence-Jones*
Light chain only	0	2
IgG	20	3
IgA	8	1
Total	28	6

TABLE 3

Bence-Jones Proteinuria Compared to Urinary Protein Electrophoresis on 34 Patients with Multiple Myeloma

	Positive Bence-Jones Proteinuria	*Negative Bence-Jones Proteinuria*	*Positive Urine Protein Electrophoresis*	*Negative Urine Protein Electrophoresis*
Number of Patients	6	28	24	10
Percentage of Total Patients	17.5%	82.5%	70%	30%



Graph 2

highest level of IgG found was 12,600 mg./dl.; the lowest, 1,350 mg./dl. The average was 5,200 mg./dl. (Graph 2). The highest level of IgA was 10,500 mg./dl. and the lowest 420 mg./dl. The average was 2,400 mg./dl. (Graph 2). The patient with IgM myeloma had 14,500 mg./dl. of IgM (not shown in the table). Patients were followed using immunodiffusion and several bone marrow biopsies to detect the response to therapy. Improvement in both were seen if remission occurred.

The diagnosis of the type of multiple myeloma today has become much more precise. Previously, the patient had a skeletal survey, bone marrow biopsy and serum protein electrophoresis to determine whether he had multiple myeloma. Now, immunological methods are available to classify the type of immunoglobulin involved and myelomas are classified as IgG, IgA, IgD, IgE, IgM, and light chains Kappa and Lambda.

The specific class of immunoglobulin involved can be identified by performing a serum immunoelectrophoresis. The presence of light chains in the urine can be identified by the same method as to whether they are Kappa (K) or Lambda (L). Using the same procedure, particular heavy chain fragments can be identified in the serum or urine. Using the enumeration of rosette-forming cells and immunofluorescent methods, the cells in the blood and bone marrow can be typed as to whether they belong to the "T" or "B" system. More advances are certain to come in this rapidly evolving field.

Conclusions

A study of 44 documented cases of confirmed multiple myeloma, reviewing the West Virginia University Hospital medical records from 1972-74, are presented.

Serum and urine protein electrophoresis and immunodiffusion were performed to confirm the type of immunoglobulin present. No correlation was found between the degree of elevation of the immunoglobulin present and the percentage of replacement of the bone marrow by myeloma cells.

In come cases, several bone marrows from both posterior iliac crests were performed in order to make a diagnosis. The importance of multiple myeloma being a "B" cell dyscrasia is discussed. Our conclusions agree with those presented by other investigators. A brief discussion of multiple myeloma as a plasma cell dyscrasia is presented.

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Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

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Testicular Torsion In Neonates

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Torsion of the testicle or the spermatic cord is a urological emergency, where the time between the onset of the symptoms and exploration is of utmost importance. Two cases of neonatal testicular torsion are reported. When in doubt, it is better to explore than wait. In neonates, since there is no pain, the brunt of diagnosis lies on an alert pediatrician and/or a knowledgable nursery staff. Every attempt should be made to salvage even a questionably viable testicle.

TORSION of the testicle, its appendage, or the spermatic cord is a urological emergency. The time between the onset of symptoms and the exploration is of the utmost importance if the testicle is to be salvaged for its spermatogenic function. Adults and small children seek medical attention because of pain. In neonates, however, an awareness and complete physical examination is the only way to diagnose this entity.

We are reporting two cases of neonatal testicular torsion.

Case Presentations

Case one (B.V.): A full-term baby boy was born at 3:30 P.M. in an outlying community hospital. The same evening, the referring physician noted the left side of the scrotum to be bluish in color and the testicle was hard. A hydrocele was noted on the right. Three days later, the attending urologist was called because the child was having difficulties voiding. The child was immediately transferred to a local hospital where scrotal exploration was further delayed because of severe diarrhea. After proper hydration and control of diarrhea, the left side of the scrotum was explored. The left testicle was gangrenous; therefore, left orchiectomy was done. At the same time, hydrocelectomy, transfixation of the right testicle and circumcision were performed. Microscopically, necrosis and calcification of the testicle appeared. The vessels at the hilum of the testicle were dilated and filled with focally calcified thrombotic material. The calcification suggested chronicity to the lesion and that torsion and necrosis must have occurred *in utero* (Figures 1, 2, 3). Postoperatively, the patient made satisfactory recovery and was discharged in good condition.

Case two (P.L.F.): A full-term baby boy was delivered without problems. On routine physical examination by the pediatrician, the right side of the scrotum was found to be dark bluish in color and firm in consistency. The child underwent surgery three hours later. At exploration, torsion of the spermatic cord was found. An attempt was made to untwist and revive the testicle. There being no improvement, right orchioectomy was performed. At the same time transfixation of the left testicle and routine circumcision for phimosis were done. Pathology revealed a gangrenous testicle with hemorrhagic infarction (Figure 4). Microscopic sections (Figures 5, 6)

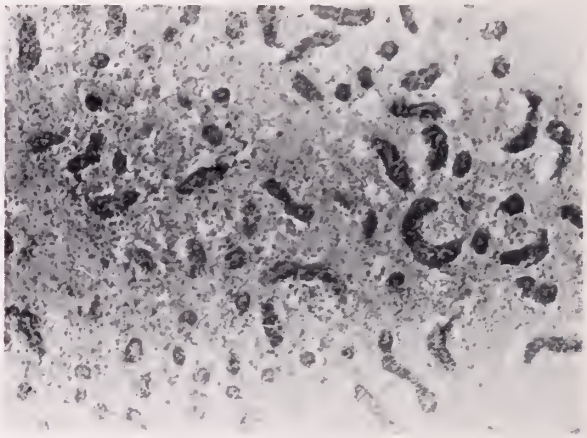

Figure 1. Shows infarcted testicle with remnants of tubules accompanied by interstitial inflammation. (H&E x 100)

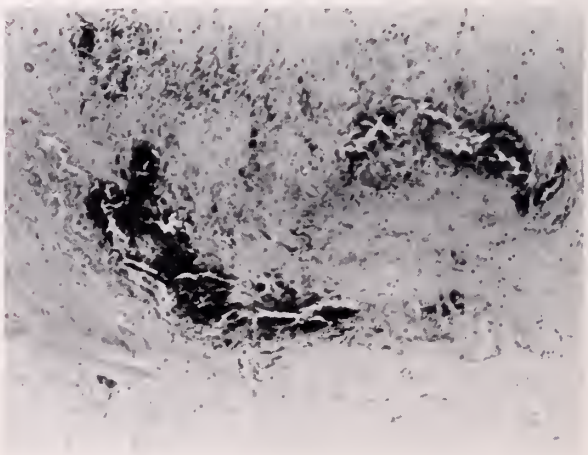

Figure 2. Testicular infarction with calcification and minimal reactive inflammation. (H&E x 100)

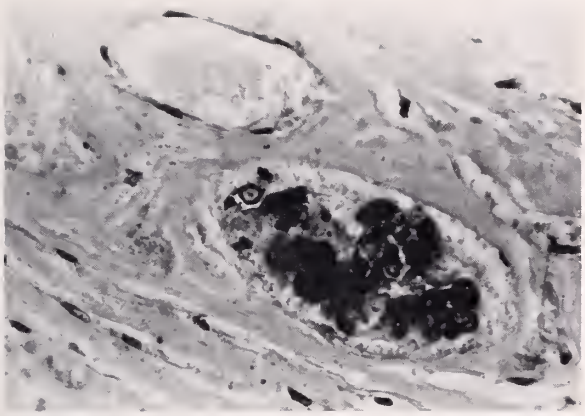

Figure 3. Calcified thrombus in a blood vessel near testicular capsule. (H&E x 450)

showed diffuse necrosis of the tubules with areas of hemorrhage. He has done very well and his left testicle is growing satisfactorily with age.

Discussion

Taylor[1] first reported the condition in 1897. Hyams[2] reviewed the world literature and came up with a total of 70 cases and added one of his own. Subsequently, several more cases[3,4,5,6,7] have been reported. Diagnosis in neonates is suggested by a painless, non-tender, hard, bluish swelling in the scrotum.

Differential diagnosis should include:

a. Tumor of testis
b. Birth traumatic hematoma
c. Strangulated hernia
d. Orchitis
e. Scrotal hydrocele
f. Torsion of the appendage of the testis
g. Ruptured varicocele or scrotal hemangioma

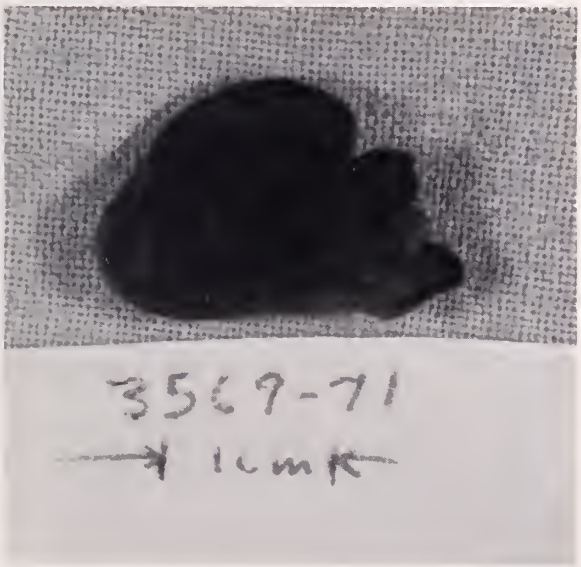

Figure 4. Cut surface of the specimen revealed diffuse hemorrhagic infarction of the testicle and surrounding epididymis.

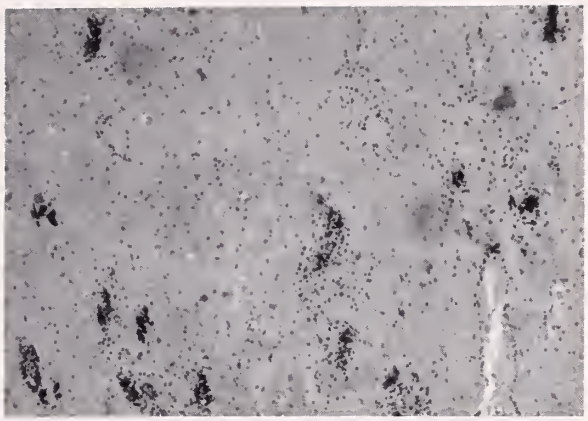

Figure 5. Low-power section revealed diffuse necrosis of the tubules interspersed by small islands of round cells.

There is considerable discussion in the literature about the early diagnosis of torsion of the testicle. Approximately less than six hours duration is considered a safe period after which chances of salvaging a testicle are rather remote. When in doubt as to the diagnosis, it is better to explore and confirm a diagnosis of epididymitis rather than wait with torsion and lose a testicle. In cases of bilateral torsion,[8,9] which occur in about five per cent of cases,[10] it is recommended to leave the necrotic testicles in after incising the tunica albuginea of the testes in the hope of saving the endogenous hormonal function.[11] Others believe that the necrotic testes should be removed, prosthesis implanted and the patient be treated with substitution hormonal therapy.

Unfortunately, in neonatal or in utero torsion, the brunt of diagnosis lies with the pediatrician whose alertness may make the difference. In all the neonatal cases reported in the literature, orchiectomy was the rule, even though stress is laid upon early diagnosis and possible salvage of the testicle.

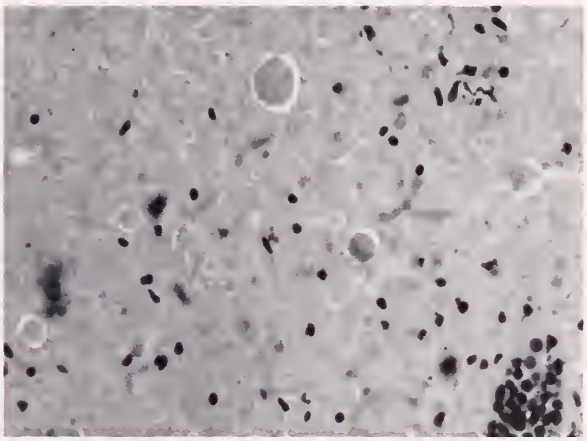

Figure 6. High-power view showing necrotic and hemorrhagic tubules.

Acknowledgments

We wish to thank Mrs. Rhonda Ours for the manuscript and the Department of Pathology at Cabell-Huntington Hospital for photography.

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AMA Cyclist Helmet Report

In a recent report entitled, "Head Protection for the Cyclist, A Medical Inquiry," the American Medical Association strongly recommended that no one should operate or ride as a passenger on a motorcycle, moped, or even bicycle without wearing a helmet.

The report, issued by AMA's Department of Health Education, is the result of a special conference on head protection sponsored by the AMA in April, as well as a survey of scientific literature on the subject. The conference consisted of 20 experts, including physicians, medically-oriented researchers, representatives of the motorcyclists, as well as manufacturers.

Although the report purposely avoids the issue of compulsory helmet legislation, which is being challenged by motorcyclists throughout the country, it effectively refutes many of the arguments used in influencing legislators to repeal state helmet-use laws.

In response to the argument often used that helmets *cause* cervical spine and clavicle injuries, the report states categorically that "helmets do not of themselves contribute to or worsen the injury." The report states further that if forces are strong enough to cause such an injury to the spine with the helmet, those forces would almost invariably cause a fatal head injury to the unhelmeted cyclist if his head struck the pavement or other unforgiving objects in a crash.

Medical Grand Rounds

From the West Virginia University Hospital

Edited By
Raymond B. Weiss, M. D.
Associate Professor of Medicine

PERICARDITIS

Discussants:

EVERETT B. WRAY, M. D.
Fellow in Cardiology.

RONICA M. KLUGE, M. D.
Associate Professor of Medicine and Chairman of the Division of Infectious Diseases.

THOMAS J. TARNAY, M. D.
Professor of Surgery, Division of Cardiovascular Surgery.

ABNASH C. JAIN, M. D.
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Medicine Resident.

Doctor Moore:

Case History

The patient is a 26-year-old male referred to the West Virginia University Hospital with the chief complaint of recurrent chest pain. The first episodes of chest pain occurred eight years ago. Since that time the patient had 17 episodes of chest pain. The episode usually lasted one to two weeks. Between these periods, the patient remained asymptomatic and capable of normal activities. The chest pain was described as severe and substernal, with radiation to the left supraclavicular area. The pain was pleuritic and exacerbated by the supine position and somewhat relieved by sitting up. During heights of the painful episodes, the patient slept in the sitting position. The patient usually had fever, and there was shortness of breath. The pain was definitely non-exertional.

The patient was hospitalized on six occasions with the pain. Intradermal PPD tests had always been negative. Aspirin and indomethacin (Indocin) therapy did not help the pain.

The patient was admitted for the first time to WVU Hospital in November, 1976, with the recurrent chest pain. On physical examination the patient was in mild discomfort with a respiratory rate of 22 and temperature of 37.4°C. The pulsus paradoxicus was 12 mm of Hg with a blood pressure of 140/80 and a regular pulse of 92. There was no Kussmaul's sign, the lungs were clear, and an Ewart's sign was not present. The heart sounds were faint, but no murmur or rubs were heard.

On admission the sedimentation rate was 115, the white blood count was 11,400 with a normal differential, and the hemoglobin was 11.4 gm. per cent. A serum chemistry profile was within normal limits except for a mild elevation of alkaline phosphatase. A chest x-ray showed mild cardiomegaly. A bicycle exercise stress test (BEST) was normal at 175 watts. An ECG was consistent with pericarditis (Figure 1), and an echocardiogram was consistent with pericardial effusion (Figure 2). The antinuclear antibody,

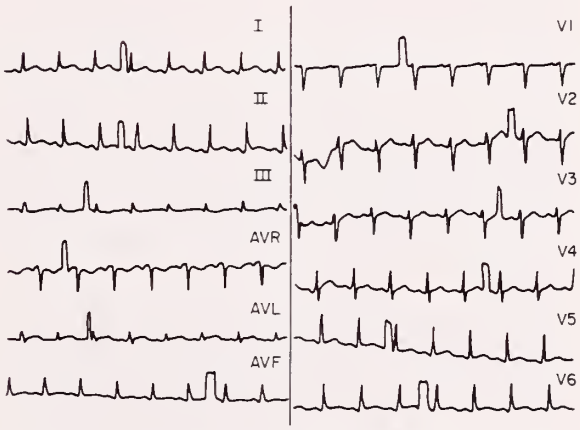

Figure 1. 12-lead electrocardiogram revealing sinus tachycardia (115/minute) and elevation of the ST segment in most of the leads consistent with acute pericarditis in the presented patient. (A normal ECG was seen two days prior to this one.)

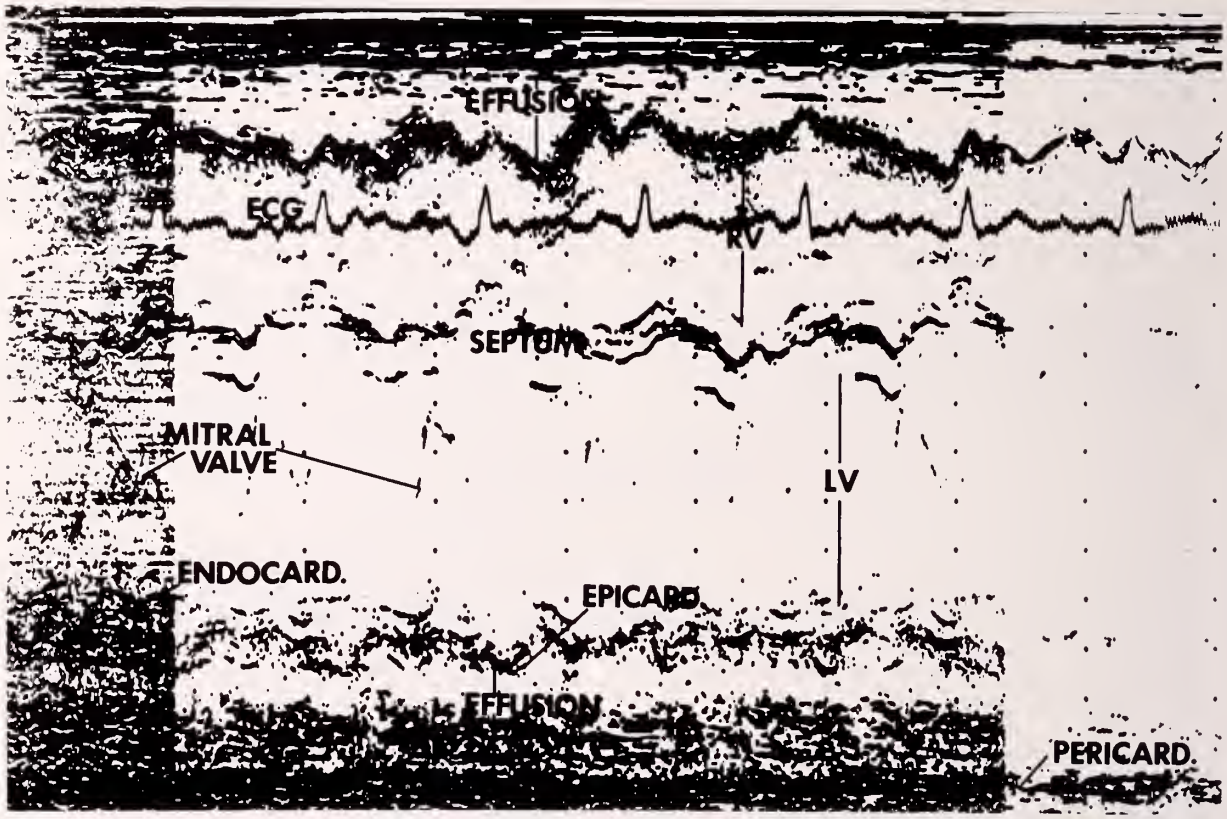

Figure 2. Time-motion-mode echocardiogram reveals a moderate degree of echo-free space behind the posterior wall of the left ventricle.

rheumatoid arthritis factor, and cold agglutinins were negative. The intradermal PPD was negative.

The pain did not respond to high doses of aspirin and indomethacin. A pericardiocentesis yielded 325 cc of hemorrhagic fluid with a specific gravity of 1.038, protein of 6.4 gm per cent, glucose of 85 mg per cent (serum glucose of 122 mg per cent), and an LDH of 600 units. The red blood cell count was 1.28 million per mm^3 with a white blood count of 3800 with 67 per cent neutrophils, 32 per cent lymphocytes, and one per cent monocytes. Cytologic examination did not reveal malignant cells. Bacterial cultures, viral cultures, fungal cultures, and acid fast bacillus (AFB) cultures of the pericardial effusion were negative. Sputum cultures for AFB were negative. Viral cultures of the urine and feces were unrewarding. Fungal serologies were negative.

A week later, the patient experienced increasing chest pain, a fever of 39.4°, and dyspnea. The white blood count was 22,000 with 22 per cent band forms. The chest x-ray revealed increasing cardiomegaly (Figure 3). Blood cultures were negative. High-dose prednisone therapy was started and the patient's condition gradually improved during the next two weeks with disappearance of the fever, dyspnea, and pain. Three weeks later a pericardiectomy was performed.

Doctor Wray:

Symptoms of Pericardial Disease

The pain of pericarditis is in many ways very characteristic, but it may be confused with that of myocardial infarction (MI). The pain of pericarditis is typically more precordial in location as opposed to the substernal location in MI. It is accentuated by deep breathing or twisting of the thorax. Swallowing occasionally worsens the pain due to the close anatomical proximity of the pericardium and esophagus. The pain is usually related to posture, worsened by the supine position, and relieved by sitting up and leaning forward. It may radiate into the left trapezius ridge, which is in contrast to the pain of myocardial infarction which classically radiates to the arms or neck. Despite the historical differences, the definitive diagnosis is often delayed until after serial laboratory studies are obtained. Our patient demonstrated constant pain related to posture. This was classical of pericarditis. If there is any doubt as to the diag-

Figure 3. Chest x-ray showing the globular, generalized enlargement of the heart due to pericardial effusion.

nosis, then initial management should be that of MI, since this is the more serious and life-threatening of the disorders.

Physical Examination

The pathognomonic physical finding of pericarditis is the pericardial friction rub. However, this finding is not always present. Typically, the friction rub has three distinct components though frequently only two components or even one (in which case it is systolic) may be audible. These components coincide with the movement of the heart within the pericardial sac. This movement occurs during atrial systole, ventricular systole, and early ventricular diastole during the rapid phase of ventricular filling. Therefore, the components of the rub are presystolic, systolic, and protodiastolic.

The rub is usually heard along the left sternal border with the patient leaning forward in forced expiration. It may be quite fleeting, however, and should be searched for on numerous occasions as well as in various positions. Variations in the intensity of the rub may occur with respiration without an accompanying pleural component. The presence of a significant effusion tends to decrease the incidence of an accompanying rub; however, the presence of a rub does not exclude a significant effusion.

The other signs of pericarditis are associated with the presence of pericardial effusion. There may be a disparity between the location of the apex impulse and the area of cardiac dullness by percussion in patients with pericardial fluid. This finding is limited, however, by the frequent difficulty in palpating the apex impulse in these subjects. Also, there may well be an associated left pleural effusion which might obscure the area of cardiac dullness making diagnosis impossible.

A pericardial knock, which is classically described in constrictive pericarditis, may also be heard in patients with only pericardial effusion. This knock is an early diastolic sound occurring 60 to 120 milliseconds after the second heart sound. It is due to the abrupt cessation of flow following the rapid phase of ventricular filling and, in this respect, is analogous to the third heart sound.

A third sign of pericardial effusion is Ewart's sign. It is the presence of dullness to percussion with associated bronchial breathing beneath the angle of the left scapula. This sign is not specific to pericardial effusion.

The remaining signs and symptoms of pericardial effusion are those related to compression of the heart due to cardiac tamponade. Cardiac tamponade may occur with the rapid accumulation of 100-200 cc of fluid, though the slow accumulation of more than a liter may result in no symptoms whatsoever. Dyspnea is a very common complaint when tamponade develops. Orthopnea is usually absent, but when the constriction is severe, this may become a prominent symptom as well. There is evidence of elevated venous pressure with distended jugular veins, hepatomegaly, and frequently edema. The arterial pressure may be reduced though I have personally seen hypertension in the presence of severe tamponade. The pulse pressure is also usually lowered. Pulsus paradoxicus (an inspiratory drop of greater than 10 mm Hg in blood pressure) is invariably present in cardiac tamponade. The heart sounds may be diminished, but the presence of normal or even loud sounds does not rule out cardiac tamponade.

Laboratory Findings

Certain laboratory tests may be helpful in distinguishing patients with suspected pericarditis. The 12-lead electrocardiogram may show diffuse ST-segment elevation within the first few days of the illness. The lack of reciprocal ST-depression and lack of eventual development of Q waves help to distinguish these changes from those of myocardial infarction. The ST-segment usually returns to baseline within several days, but J depression may produce apparent ST elevation for longer periods of time. The T-wave frequently inverts following return of the ST-segment to baseline. In the presence of pericardial effusion there may be decreased QRS voltage, and electrical alternans may occur in cardiac tamponade.

Several radiologic studies have been utilized in patients with suspected pericarditis. All of

these are useful only if pericardial effusion is present. The PA chest x-ray may reveal a globular enlargement of the cardiac silhouette. This finding is relatively insensitive, however, as it requires several hundred milliliters of fluid to have accumulated before changes become apparent. Injection of 50-100 cc of carbon dioxide via a peripheral vein with a subsequent left lateral decubitus radiograph of the chest has also been used in patients with presumed pericardial effusion. An increased distance (4-5 mm) between the CO_2 "bubble" trapped within the right atrium and the cardiac silhouette indicates an accumulation of pericardial fluid. Angiocardiograms, utilizing injection of contrast medium into the right atrium, have been used in a similar manner for the diagnosis of pericardial effusion. This procedure has the drawback of being invasive, though it is relatively specific.

Echocardiography, a non-invasive and a simply-performed test, is now the method of choice for the diagnosis of pericardial effusion at this institution. It has been shown to be a sensitive procedure capable of detecting as small an amount as 20 milliliters of pericardial fluid. With careful attention to the obtaining of technically good echoes from the posterior left ventricular wall and other intra-cardiac structures such as the mitral valve, it is also a very specific method for detection of fluid in the pericardium. In addition to the routine diagnosis of pericardial effusion, several recent reports have indicated changes in the echocardiogram which may be useful indicators of cardiac tamponade and possibly constrictive pericarditis. However, only future work with these entities will better delineate the sensitivity and specificity of these findings.

Doctor Kluge:

Infectious Agents Causing Pericarditis

Virtually every kind of infectious agent has been described as a cause of acute pericarditis. In order of decreasing frequency, they are: viruses (especially Group B Coxsackie), *Mycobacterium tuberculosis* and other pyogenic bacteria, fungi, and protozoa.

The most common clinical form, however, has no definable etiology and is therefore designated acute idiopathic, acute benign, or acute nonspecific pericarditis. This diagnosis is one made by exclusion only. Because symptoms of a URI often precede the onset of symptoms in these cases, a viral etiology has been postulated.

Infectious agents may reach the pericardium either by the bloodstream or by direct extension from a nearby focus of infection. Viral agents are generally presumed to be blood-borne, while *M. tuberculosis*, fungi, and protozoa are more likely to reach the pericardium from adjacent organs such as the mediastinal lymph nodes. An acute inflammatory response with increased neutrophils may be expected with pyogenic bacteria and in the early stages of other infectious agents. In some instances, pericarditis may be the result of immunological injury as much as from cytotoxicity due to the presence of the organism. In viral and idiopathic pericarditis the latency period between the initial evidence of a viral infection and the development of evidence of pericarditis suggests that an autoimmune mechanism may be involved. Recurrent attacks of idiopathic pericarditis add credence to this hypothesis, as does the response to steroids.

Pathologically, granulomatous reactions are prominent. Although the inflammatory process may be low-grade, fibrinous exudate forms within the pericardial sac, resulting in adherence of the visceral and parietal layers. Subsequent healing through organization may bind the layers of pericardium together and to the myocardium. Cicatricial contraction may evolve over weeks to months at a rate and extent determined by the nature of the etiologic agent and the kind of response mounted by the host.

With an acute process the patient commonly complains of chest pain which is pleuritic in nature. Fever, palpitations, dyspnea on exertion, and symptoms of an underlying systemic illness may be the presenting complaints. Unfortunately, these symptoms do not differentiate the etiologic agent responsible for the pericarditis.

A specific viral or vague influenzal-like syndrome often precedes viral pericarditis by one to three weeks and is helpful in establishing a presumptive viral etiology. A definitive diagnosis of viral pericarditis can be made only if the virus is recovered on culture (possible in only a minority of cases) or if a specific serologic titer rise is noted. The pericardial fluid may be clear or bloody, but is not otherwise characteristic. The viruses most often associated with pericarditis are those of the Coxsackie and ECHO groups.

With a longer duration of symptoms, a viral etiology is less likely and tuberculosis becomes a possibility. Protracted fever, weight loss, cough, dyspnea, orthopnea, and fatigue are more often seen in tuberculous pericarditis. In these patients you may expect to elicit a delayed hyper-

sensitivity response to the PPD skin test; an abnormality of the chest roentgenogram will be detected in 30-60 per cent of the cases. The pericardial fluid usually contains more than 2.5 gm per cent protein. Acid-fast smears of the pericardial fluid may be positive. The pericardial fluid will yield the tubercle bacillus on culture in approximately 50 per cent of the cases; pericardial biopsies are diagnostic in about 75 per cent. One may have to confirm the diagnosis by recovering the organism on culture of other sites such as sputum, pleural effusion, pleural biopsy, bone marrow, liver or lymph node biopsy.

The nature of purulent pericarditis has been gradually changing and recent reports emphasize the following: (1) a decreased incidence of concomitant pleuropulmonary infection; (2) a decrease in the occurrence of pneumococcal pericarditis; (3) an increased incidence of hospital-acquired infections; (4) an increase in the number of cases in the elderly or otherwise debilitated patient; and (5) its emergence in patients who have undergone extensive thoracic or cardiac surgery, in the patient with pre-existing nonpyogenic inflammatory pericardial disease, and in the patient with uncontrolled myocardial or endocardial infection. Two aspects of purulent pericarditis have *not* changed: the presentation may be insidiously subtle, and the diagnosis may go unappreciated until autopsy! The patients who developed purulent pericarditis following thoracic surgery, or who had an associated primary intracardiac infection, all died in one series.[2] In this same report, all patients who had a primary bacteremia with seeding of the pericardium survived. The most common organism causing purulent pericarditis is the *Staphylococcus aureus*. Other etiologic agents include fungi, *Strep. pneumoniae* (Diplococcus), *Hemophilus influenzae* and gram negative bacilli. The pericardial fluid in patients with purulent pericarditis usually has a white cell count in excess of 50.000/mm.^{3} of which 90 per cent or more are neutrophils. The glucose content of the fluid is usually depressed and the protein ranges from 3-6 gm per cent. The Gram stain of the fluid should reveal the causative micro-organism. Protozoa such as toxoplasmosis and *Entamoeba histolytica* have been reported as rare causes of pericarditis.

Treatment and Prognosis

The therapy and expected outcome of pericarditis are somewhat dependent on the etiologic agent. Patients with viral or idiopathic pericarditis should receive symptomatic treatment consisting of bed rest, aspirin or indomethacin, occasionally steroids, and analgesics as necessary. One can anticipate spontaneous and complete recovery in 80 per cent of this patient group within a few weeks. In the remaining 20 per cent, illness may persist for three months or longer. Approximately 20 per cent of patients will develop recurrences over a several-month to two-year period after the initial episode, but most will eventually recover completely.

For tuberculous pericarditis, most authorities recommend combination therapy with two or four antituberculous agents, one of which should be isoniazide. Therapy is continued for 18 to 24 months. Steroids may be administered early in the course, although their effectiveness is controversial. The outcome in tuberculous pericarditis is less satisfactory than that in viral disease. Tuberculous pericarditis generally exists in association with widespread disease and the diagnosis may be delayed. Thus, the mortality approaches 40 per cent. Survivors should be followed for life for signs of constrictive pericarditis.

When purulent pericarditis is diagnosed, the required therapy is drainage by repeated taps or pericardiectomy *plus* appropriate antimicrobials administered intravenously. Intrapericardial instillation of antibiotics is not necessary and is probably contraindicated due to a risk of secondary infection and chemical inflammation. Antibiotic therapy should be continued for four to six weeks. The outcome in patients with purulent pericarditis is directly related to the speed with which the diagnosis is established and treatment is initiated.

Doctor Tarnay:

The surgeon's role in management of pericarditis is straightforward. Surgery is indicated for medical failure. Medical failure includes prolonged chronicity (as in this patient), the persistent need for large doses of corticosteroids, recurrent pericardial effusion refractory to a reasonable number of pericardiocenteses, and pyogenic collections about the heart.

At surgery the pericardium in this patient was grossly thickened and adherent to the undersurface of the sternum. A midline sternotomy was chosen in order to facilitate total pericardiectomy, since it seemed important to remove all this tissue lest chronic constrictive pericarditis ensue. There was minimal fluid in the cavity; apparently the short course of corticosteroid administration had allowed the effusion to subside. The pericardium itself was 3 mm in thickness and, in addition, there was a fibrous peel over the right atrium and great veins. Another

area of peel existed over a portion of the left ventricle. The entire pericardium from the phrenic nerve on the right to the pulmonary veins on the left was excised. During the procedure the left phrenic nerve was carefully dissected free and left intact.

Postoperatively, the patient indicated he was more comfortable than he had been during his severe attacks of pericarditis. Specimens of the tissue sent for culture were reported as sterile. Pathological examination of the tissue revealed only chronic inflammation. There was no evidence of granulomata.

For simple reaccumulation of pericardial fluid, the usual surgical approach consists of a short left anterior thoracotomy and creation of a generous pericardial window. Until the process subsides, fluid drains from the window and then is reabsorbed in the pleural cavity.

In the event that the effusion is pyogenic, a small mediastinotomy with removal of two costal cartilages allows access to the pericardium for drainage and placement of an aspiration and irrigating catheter. Fortunately, chronic constrictive pericarditis does not usually supervene, although these patients should be followed carefully.

Chronic constrictive pericarditis only rarely follows the nonspecific inflammatory variety. If it does develop, whatever the cause, the surgical procedure is fraught with hazard since the pericardium is very densely adherent to the myocardium, and in the decortication process muscle may be injured. Thus, inadvertent entry into one of the ventricular or atrial chambers may occur. Further, the position of the coronary vessels is not visible beforehand and injury may occur to artery or vein. The surgeon should be sure that the pericardiectomy is complete, and there should be no constriction at the venous confluences with the right atrium.

Doctor Jain:

This patient had a fascinating history of recurrent chest pains for the previous seven years. The common noninfectious causes of chronic pericarditis and effusion are hypothyroidism, idiopathic, radiation, and uremic pericarditis, but the exact etiology of this patient's recurrent pericarditis is uncertain. He had several admissions in other hospitals where no definite diagnosis could be made. A chest x-ray done in November, 1976, at the WVU Hospital did reveal slight enlargement of the heart, but this was not very definite. This man is obese, weighing 250 pounds, and had a poor inspiratory chest film. A simple test of his sedimentation rate (105 mm/hr) in the outpatient clinic pointed out that he needed further evaluation.

An echocardiogram clearly demonstrated a large amount of pericardial fluid. After the establishment of the diagnosis, air was injected into the pericardial sac, and this revealed a markedly thickened pericardium. As was done in this patient, most of the time one has to resort to pericardiectomy in recurrent pericarditis because some patients end up with constrictive pericarditis.

The differentiation of constrictive pericarditis from myocardial disease may at times be difficult. In constrictive pericarditis, egg-shell calcification of the pericardium may be seen. At cardiac catheterization, there is elevated right atrial pressure and an early diastolic dip in both ventricles. Right atrial and ventricular pressures, pulmonary diastolic pressure, pulmonary capillary wedge pressure, and left ventricle end-diastolic pressure all tend to be identical. The differentiation of pericarditis from myocardial disease, especially from amyloidosis, may be difficult, but usually pulmonary-wedge pressure is higher than right-atrial pressure.

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A message from . . .

The President

ANOTHER ASSOCIATION YEAR

With the Annual Meeting at The Greenbrier once again behind us, YOUR Medical Association has embarked on another year. And as I write this first monthly message as YOUR new President, I feel a strong sense of humility along with a deep awareness of the trust you have placed in me and the other officers with whom I shall serve.

I, and all of you, are grateful for the fine effort put forth in the past year by Jack Mahood. He was truly a President on the go, whose knowledge and dedication now will be put to further use on YOUR behalf as he serves as Chairman of our Council in 1977-78.

I am determined that YOUR Association will have a good new year. I'm also very aware that the months leading to the 111th Annual Meeting next August will not be easy ones. The challenges facing medicine, and YOUR Association, in our constant drive toward ever-better care for those we serve, are awesome and certainly will become even more so. But with YOUR help—YOUR interest—YOUR wisdom—and YOUR commitment to promotion of the public health as our Constitution decrees, it can be a good year.

I pledge my every effort toward this goal, and I know I can count on you to do the same, on behalf of YOUR Association, and all West Virginians.

Joseph A. Smith, M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

LOBBYISTS

The past two Congresses have produced a spate of bills designed to control the influence of lobbyists. None has yet been found entirely to the liking of members of Congress.

The occasion for the submission of these bills is the growing notion that lobbying is somehow a sinister occupation engaged in by selfish groups utilizing unscrupulous and rather predatory agents to accomplish their nefarious purposes. This is a mistaken notion.

Lobbyists, in general, are honest and honorable people. They are experts in the field or interest they represent, and are kept constantly supplied with the most recent information and data relating to conditions within the group they represent. This information they transmit to members of Congress in the manner of an educational service. In this role, they function as resource people to the Congress.

For the most part, lobbyists are highly regarded and appreciated by members of Congress for the service they perform. This is so simply because with whatever knowledge, wit, charm, cleverness and wisdom it takes to be elected to Congress, these attributes are inadequate to the requirement of amassing the quantities of highly technical information needed to make responsible judgments on the countless subjects legislators are called upon to evaluate.

The current Washington scandal involving South Korean CIA activities points up the fact that there are other lobbyists plying their trade in a different manner using other than technical information to accomplish their persuasive ends.

Beyond this, however, and much more importantly, it points up the fact that there are members of Congress susceptible to such persuasive efforts.

It is probably only human for Congress thus to divert attention from the weakness and corruptibility of its own members to the potentially corrupting influence of certain lobbyists. It must all be rather embarrassing for the honest members of Congress to identify themselves with their corrupt colleagues by seriously considering measures to protect themselves from corrupting influences.

It would appear that the controls being considered are directed at the wrong people. Temptation will not be legislated away. There are far more numerous and serious sources of temptation than lobbyists available in Washington.

Lobbyists perform a useful and valuable function. To silence them through controls is to diminish the people's right to be heard in the legislative halls. What is needed is resolution on the part of honest members of Congress to identify, prosecute and evict their dishonest colleagues.

ONWARD, UPWARD— OR SOMEWHERE

The big debate goes on . . . and on . . . and on. The subject: today's medical care costs, including the idea that you can get more for less through one approach or another. But can you? The following observations by James D. Mallory, M. D., Editor of the Journal of the Tennessee Medical Association, as expressed in the June issue, provide some further solid thoughts on the general subject:

"We are being pushed, shoved, driven or led, depending on your viewpoint, into what I can view only as a national schizophrenia by the cost of medical care, and as often occurs with schizophrenia, paranoia is developing in various segments of society, leading to destructive tenden-

cies, self or otherwise. Two mutually exclusive demands are being made, which I propose to consider briefly, along with some of the mechanisms currently being proposed to attain them.

"The first demand is for high quality 'health care' which includes, but is not synonymous with, medical care, for all our citizens, regardless of race, creed, color, place of origin—and fiscal means. Now, to say that leads to problems is a vast understatement. It presupposes several things. One is that there will be sufficient personnel and facilities to furnish both preventive health care for the well and medical care for the sick. It presumes also that these will be equally available to President Carter, urban ghetto residents, Indians on western reservations, Mississippi sharecroppers, and what have you. And it ignores the fact that in spite of ample and repeated warnings people continue to smoke tobacco, pop pills, drive while intoxicated, overeat, and do all the things guaranteed to make patients out of well folks.

"There are lots of very sophisticated things we can do for and to people, such as replace joints, kidneys or hearts, bypass clogged-up coronary arteries, take people apart both physically and mentally, and sometimes put them back together again, and keep them alive—or at least not legally dead—for years. All of this costs money —lots of money. A person of considerable means can be reduced very quickly to medical indigency. Our betters in Washington have proposed various ways in which to accomplish all of this, most of them unacceptable to those of us on the business end.

"They have spent a lot of money piling up bricks and mortar, not to mention expensive equipment, much of it in relatively, if not absolutely, inaccessible areas, and now they are having trouble manning them. Their solution has been two-fold: regulate doctors by telling them what and where to practice; and turn out more doctors, while also making doctors out of nurses and medical corpsmen. Carried to its logical conclusion, we will develop a race of 'Chinese barefoot doctors.' Unquestionably, nurse practitioners and physician assistants have a place as 'physician extenders.' But not being trained as physicians, they cannot practice medicine. But they may, yet.

"To pay for this superb health care system, various plans have been espoused to pay for and run it. Everybody has his plan, and few of the plans take into account the doctor and his wishes. Everybody, including the AMA, has his bill before Congress. This in itself has caused a lot of conversation, anxiety and paranoia in our own ranks, but it is from the knowledgeable viewpoint of our leadership, the only way in which medicine can get its views considered on Capitol Hill. Tennessee Medical Association passed two resolutions about it. One was an emasculated apple-pie-and-motherhood type of resolution stating that in any case we don't want the federal government running the plan. (If the nation wants to survive fiscally it had better not.) The other lays down guidelines for national health legislation.

"President Carter, the labor unions, and now many corporations are committed to passage of some form of national health insurance, and soon. This must be clearly distinguished from a national medical service. The former is a plan to pay for privately performed medical services. The latter is medical service performed by the government. Whether or not the first would inevitably lead to the second is at present moot. We do not presently have a national health insurance plan in effect probably only because the administration and Congress have looked at the tab, and have decided some other things need doing first.

"What needs doing first brings me to the second chapter in this rather sordid account. (I promise it will get worse before it gets better.) Having looked at the tab, Mr. Carter and his minions in and outside of Congress have decided that costs need cutting, or at least holding down, so legislation is now before the Congress which would do just that—theoretically. It would clap a lid of a nine per cent annual increase on hospital revenue, adjusted for increased occupancy. It would not take into account cost increases, and would therefore be incentive for hospitals to effect economies, as costs have been going up at a rate of about 13 per cent, and a labor-proposed wage increase is going to make it go up even faster.

"All this leads to some interesting questions. In the face of decreased profit ratio, how does one effect economies? Restaurants, as an example, increase prices. Failing that, they hire fewer waiters and make the portions of lower quality food smaller. The service gets bad, and people go elsewhere. Translated into hospitalese, there will be fewer nurses, fewer house officers, less and worse food, and, more important, fewer of those expensive services. The problem is: There ain't no place else to go!

"Is President Carter, or his HEW henchmen, going to say that Patient A can receive renal dialysis while Patient B cannot? Or that Patient C can have a coronary artery bypass while Patient D cannot? You had better believe they

aren't. There will be guidelines on which—*who* will decide? The doctors, that's who. *You* will wind up being the bastard!

"I told you it would get worse before it gets better. Only I can't right now see 'better' anywhere on the horizon until the public first receives and then gets tired of inferior care. The British still haven't revolted and elective surgery there has been virtually non-existent for years, but then the British generally are a docile lot. Not so the inhabitants of the US of A—at least not yet.

"They can't have it both ways, so how do they want it? By the time they find only one way is possible, and decide which they want, it may be too late. The magnificent medical care system which has been so carefully built over so many years will have disintegrated.

ESTROGEN RECEPTOR

New techniques in biochemical assay of tissue and, specifically, surgical pathology specimens have made possible the detection and measurement of cellular hormone receptors in tumors. This has been applied to breast cancer, where the binding of hormones, especially estrogen and progesterone, to receptors in tumor cells may serve as an indicator of potential response to hormonal chemotherapy or ablative endocrine surgery.

It has been well known from past observations that estrogen may inhibit breast cancer growth and even eradicate the tumor, albeit temporarily. Paradoxically, certain mammary carcinomas appear to be stimulated by estrogen. The problem has been to determine in advance which tumors may be amenable to varying types of hormonal therapy, since in the past a favorable therapeutic response occurred in only 30 per cent of non-selected cases, and in fact the hormonal treatment sometimes appeared to be clinically detrimental. Similarly, ablative endocrine therapy was variably effective and unpredictable.

Now, measurement of estrogen receptor (ER) adds a new tool and an additional scientific "handle" for treatment of this dread disease. The estrogen receptor site test done on surgically removed specimens has recently become part of the routine evaluation workup in many medical centers throughout the world. Surgeons are becoming accustomed to submitting tumor tissue to the pathologist at the time of biopsy (i.e. frozen section diagnosis). The tissue is frozen within 10-15 minutes after removal to ensure preservation of the receptors. The specimen may be kept safely in the frozen state (deep freeze) until it can be conveniently analyzed. Results can be obtained in six days. Several laboratories in New England perform the test. The fee is not inexpensive, which should be no surprise, since it requires analysis by experts using sophisticated and expensive equipment. Specimens must be carefully shipped in dry ice to prevent thawing. The average cost is $150.

Measurements indicating positive ER in tumor tissue have had in the past a predictive reliability of approximately 50 per cent; this figure is beginning to improve to approximately 70 per cent. That is, patients with positive ER tests have a 70 per cent probability of responding favorably to ablative estrogen-endocrine surgery. On the other hand, more than 90 per cent of tumors that lack ER do not respond to endocrine therapy. The test can be done on metastases as well as on the primary tumor.

It has been suggested that combining measurements of estrogen receptor and progesterone receptor may better the predictive results. From the pathologist's point of view the test has complex variables, since it is done on tumors of varying cellularity (with intervening non-cancerous connective tissue stroma) and differentiation which may be expected to alter the numbers of ER sites found in any given tumor. Nevertheless, despite its inherent complexities and blatant imperfections, it is an improvement over the previous unpredictable situation. Furthermore, correlation by the pathologist of the borderline ER measurements with the histologic content of the tumor (i.e., cells vs. connective tissue stroma ratio) in an adjacent section may be helpful in deciding whether or not to place the borderline patient in the positive ER group for treatment.

Finally, there remains the potential for utilizing the test results as part of the recent trend toward adjuvant (prophylactic) treatment protocols to attempt to improve survival figures by aggressive early management employing a variety of agents in the immediate post-mastectomy period.

As in all instances of the introduction of new "routine" tests in laboratory medicine, the true extent of the usefulness of the ER test in the management of breast cancer must await the test of time. Nonetheless, as is so often the case in medicine, the new test may ultimately become one contribution that must be correlated with other existing or newly developed clinico-pathologic variables before its true potential can be clearly determined.—*Herbert Fanger, M. D., in the Rhode Island Medical Journal.*

GENERAL NEWS

Birth Control Methods, Estrogen To Be Conference Highlight

A session on birth control methods and the use of estrogen will be among the highlights of the Eleventh Mid-Winter Clinical Conference to be held in Charleston next January 27-29 at the Daniel Boone Hotel.

The State Medical Association is the primary sponsor of the annual continuing education event.

The co-chairmen of the Program Committee, Drs. Ralph H. Nestmann and Joseph T. Skaggs,

John J. Schwab, M. D.

Arthur C. Chandler, Jr., M. D.

both of Charleston, announced that the birth control segment will be held on Friday afternoon (January 27) for physicians and developed as a public program Friday evening.

The co-chairmen also announced that other general subject areas for the conference tentatively will include the use of psychiatric consultation for the practitioner, child and adolescent psychiatry, biofeedback, hepatitis, bacteriology and laboratories in the community hospital, infectious diseases, allergic reactions to drugs and drug interactions, dialysis, and ophthalmology.

The conference schedule also will include a Friday evening physicians' session, held concurrently with the public session, on the Association's legislative program; and a dinner program Saturday evening.

Among those physicians who have accepted invitations to speak are Drs. John J. Schwab of Louisville, Kentucky, who is scheduled for Saturday morning; and Arthur C. Chandler, Jr., of Durham, North Carolina, Sunday morning.

Psychiatric Consultation

Doctor Schwab will discuss the use of psychiatric consultation for the practitioner.

An alumnus of the University of Louisville's School of Medicine, Doctor Schwab returned in January, 1974, to assume the chairmanship of the Department of Psychiatry and Behavioral Sciences. He is the author of the *Handbook of Psychiatric Consultation*, and has co-authored, with Dr. Jules Masserman, *Man for Humanity: On Concordance vs. Discord in Human Behavior*; *Social Psychiatry, Volume I;* and *The Psychiatric Examination, Volume I* of the *Serial Textbook of Psychiatry*.

Doctor Schwab was the first President of the American Association for Social Psychiatry, and is former President of The Academy of Psychosomatic Medicine, immediate Past Chairman of the American Psychiatric Association's Council on Research and Development; and immediate Past Chairman of the Epidemiologic Studies Review Committee of the National Institute of Mental Health's Center for Epidemiologic Studies. In addition, he was Principal Investigator of the large-scale epidemiologic study, "Evaluation of Mental Health Needs and Services in the Southeastern United States."

Doctor Schwab is the author of more than 100 scientific publications in the general fields of psychosomatic illness, consultation/liaison work and psychiatric epidemiology.

Ophthalmology Update

Doctor Chandler, Associate Professor of Ophthalmology at Duke University School of Medicine, will present an update in ophthalmology.

The son of Dr. Arthur C. Chandler, Charleston ophthalmologist, he is a Diplomate of the American Board of Ophthalmology and a Fellow of the American Academy of Ophthalmology and Otolaryngology. He also serves as an Associate Examiner for the Board, and was an Instructor in the Academy from 1968 through 1976.

Doctor Chandler holds a B. A. degree from Florida Southern College, an M. S. degree from the University of Tennessee, and received his M. D. degree in 1959 from Duke. He served his internship at Duke Hospital and completed a residency in ophthalmology at the Institute of Ophthalmology, Columbia-Presbyterian Hospital, in New York City.

He also is a Fellow of the Society of Eye Surgeons and the American College of Surgeons, and is a member of the American Association of Ophthalmology.

The conference will begin Friday afternoon and conclude at noon on Sunday.

Serving on the Program Committee with Doctors Nestmann and Skaggs are Drs. William O. McMillan, Jr., of Charleston, and C. Carl Tully of South Charleston.

Additional details, including other conference speakers, will be provided in later issues of *The Journal* as the program is completed.

Record Number Of Women In New WVU Medical School Class

Keeping step with the national trend of increased female enrollment in professional schools, the West Virginia University School of Medicine has admitted the largest number of women in its history to the first-year class.

Of the 88 students who were to begin classes in late August, 20 are women. The most women admitted previously were 18 in 1975. Last year's entering class had 13 women.

A woman also has the distinction of being the only out-of-state resident in the new class. She is Diane Beach of Union, New Jersey, who received her undergraduate education at WVU.

The 87 West Virginians come from 25 counties. Kanawha County is home for the largest number, 20. Cabell County has 12 and Monongalia County 11.

Those admitted completed their undergraduate education at 29 different institutions—45 were students at WVU, 23 attended Marshall University or colleges in West Virginia, and 20 attended 17 different out-of-state colleges or universities.

Selection of the new class was again a difficult task for the 12-member Committee on Admissions. More than 1,200 inquiries were received and acknowledged. Applications were sent to 338 West Virginians, 200 out-of-state residents, and eight residents of foreign countries. Applications were returned by 243 West Virginians, 144 from out-of-state residents and the eight foreign residents.

Interviews were granted to 304 applicants including 240 state, 61 out-of-state and three foreign residents.

Grade point and science average for the accepted candidates this year was 3.60 (4.0 is perfect—all A's).

Members of the class include:

BERKELEY COUNTY: Martinsburg—Mark G. Fuller.

BROOKE COUNTY: Follansbee—Ronald G. Cercone. Wellsburg—James L. Williams.

CABELL COUNTY: Barboursville—Michael C. Hyre and Steven L. McCormick. Huntington—Philip W. Day, Richard Layne Del Checcolo, Peter E. Dross, Thomas J. Jefferson, Jr., Greg A. Imperi, Samuel A. Januszkiewicz, Michael H. Pearman, Cathy L. Romine and Ted A. Williams. Ona—Roy A. Hepner.

DODDRIDGE COUNTY: Salem—Paul D. Davis.

FAYETTE COUNTY: Gauley Bridge—James L. Blackwell. Oak Hill—Mary V. McQuade.

HANCOCK COUNTY: Chester—James K. Smith.

HARRISON COUNTY: Bridgeport—Todd W. Gehr. Clarksburg—James A. Arnett, Thomas W. Croghan, Kyle W. Strader, David N. Thrush and David M. Wilson.

JACKSON COUNTY: Ravenswood—Warren L. Cooper.

JEFFERSON COUNTY: Charles Town—Ralph E. Rickel. Harpers Ferry—Mary A. Pope.

KANAWHA COUNTY: Big Chimney—Lloyd G. Cantley. Charleston—Marc B. Bloom, Michael D. Crawford, Richard E. Del Grande, Joseph H. Farris II, Adam F. Gall, Jr., William D. Halstead, Stephen N. Kissinger, Marianne B. Lindroth, Kenneth G. MacDonald, Mark A. Nunley, William A. Shabb, Robert D. Steed, Frances I. Stewart, Gregory Clayton Stonestreet and Thomas W. von Dohlen. Dunbar—David W. Ranson. Nitro—Dennis R. Knapp, Jr. and James J. Pettit II. South Charleston—Deborah F. Dickert.

LEWIS COUNTY: Weston—Robert E. Galford.

LINCOLN COUNTY: Alum Creek—Randall W. Peterson.

West Virginia State Medical Association leaders consider resolutions and other matters pending before the House of Delegates at an early-morning caucus during the American Medical Association's Annual Meeting in San Francisco in June. From left to right are Drs. Joseph A. Smith of Dunbar, then the Association's President Elect; Richard E.

Flood of Weirton, AMA Delegate; Stephen D. Ward of Wheeling, Editor of the Medical Journal and a member of the AMA's Council on Legislation; and John J. Mahood of Bluefield, nearing the end of his year as Association President.

McDOWELL COUNTY: Bradshaw—Donna M. Roberts.

MARION COUNTY: Fairmont—Robert A. Camele, Vaughn M. Eskew, Jonathan P. Levelle and Cynthia G. Susskind.

MERCER COUNTY: Bluefield—Albert J. Paine. Princeton—Wafa J. Nasser.

MINERAL COUNTY: Keyser—Carl W. Liebig.

MONONGALIA COUNTY: Morgantown—Susan E. Bonfili, Hugh H. Culton, Leo M. Fedder, Paul F. Flink, James N. Frame, Matthew M. Gangwer, James F. Gillen, James D. Haddox, Lawrence J. McKenzie, JoAnn A. O'Keefe and Catherine Rose.

NICHOLAS COUNTY: Summersville—Candace A. Adkins and John C. Baker.

OHIO COUNTY: Triadelphia—Frederick C. Blum. Wheeling—William G. Castro, John T. Dorsey III and Christopher L. Marquart.

POCAHONTAS COUNTY: Buckeye—Donald H. Moore.

PRESTON COUNTY: Independence—Frederick W. Barker. Thornton—Suzanne B. Larew.

RALEIGH COUNTY: Beckley—Susan C. Davis.

WAYNE COUNTY: Wayne—Linda S. Adkins.

WETZEL COUNTY: New Martinsville—Robert J. Peard. Reader—Brian Egan.

WOOD COUNTY: Parkersburg—Lynne E. Connolly, Kenneth R. Dunbar and Nathan A. Vaughan. Vienna—Barry V. Barrows and Anna M. Havens.

OUT-OF-STATE: New Jersey—Diane Beach, Union.

Third Annual WVU Pediatric Day Scheduled October 13

The Third Annual Pediatric Day, a program on "Gastrointestinal Problems of Infants and Children," will be sponsored by the West Virginia University's Department of Pediatrics on October 13 in Morgantown.

The program will be conducted from 8:30 A.M. to 5 P.M. in the WVU Medical Center auditorium.

Guest speakers will be Drs. Juhlung McClung, Assistant Professor of Pediatrics at Columbus Children's Hospital, Columbus, Ohio; and Susan Scheurer, Assistant Professor of Pediatrics, Michigan State University, East Lansing.

Doctor McClung will speak on "Infectious Diarrhea" and "Malabsorption Syndrome," while Doctor Scheurer's subjects will be "Failure to Thrive" and "Child Abuse."

WVU speakers also are scheduled.

Charleston Emergency Care Seminar September 16-17

An Emergency Care Seminar will be held in Charleston September 16-17 by the Charleston Area Medical Center and the Charleston Division/West Virginia University Medical Center.

James E. George, M. D.

Ellen Hrabovsky, M. D.

The site of the seminar will be the Charleston Division's new Medical Education Building located at 3110 MacCorkle Avenue, Southeast, on the campus of Charleston Area Medical Center/Memorial Division.

Registration will be held from 8 A.M. to 9 A.M. Friday, September 16, followed by a welcome from Dr. Thomas W. Mou, Dean of the Charleston Division/WVU.

Betty Sprangler, R. N., will be moderator for the scientific program. The speakers and their topics will be:

"Gastrointestinal Bleeding" — W. Warren Point, M. D., Professor and Director, Department of Medicine, Charleston Division/WVU; "Pediatric Resuscitation"—Herbert H. Pomerance, M. D., Professor of Pediatrics, Charleston Division/WVU, and Director of Pediatrics, CAMC;

"Child Abuse"—Kathleen Sherman, Can Do Director, The Salvation Army, Charleston; "Law and Emergency Medicine"—James E. George, M. D., Medicolegal Consultant, Emergency Medicine, Woodbury, New Jersey;

"Coronary Care"—William H. Carter, M. D., Clinical Associate Professor of Medicine, Charleston Division/WVU; "Head and Neck Trauma-Emergency Tracheostomy"—Romeo Y. Lim, M. D., Clinical Associate Professor of Surgery, Division of Otolaryngology, Charleston Division/WVU;

"Allergic Reactions"—Joseph T. Skaggs, M. D., Clinical Professor of Medicine, Charleston Division/WVU; and "Trauma in Children"—Ellen Hrabovski, M. D., Assistant Professor, Departments of Surgery and Pediatrics, WVU, Morgantown.

The Friday session will adjourn at 3:45 P.M., with a social hour and banquet scheduled to begin at 7 P.M.

Diane Durst, R. N., will serve as moderator for the Saturday session, which will begin at 8:15 A.M. and conclude, following discussion, at 3:45 P.M. The speakers and their subjects will be:

"Initial Assessment of the Emergency Treatment of Burns and Medical Preparation for Transport"—Kathleen Dunlap, R. N., Head Nurse, University of Michigan Burn Unit, University of Michigan Medical Center, Ann Arbor; "Burn Injury Severity: Injury Types and Triage"—Michael H. James, Director, Program Development, National Institute for Burn Medicine, Ann Arbor, Michigan;

"Emergency Management of Chronic Obstructive Pulmonary Disease Complications"—Dominic J. Gaziano, M. D., Clinical Associate Professor of Medicine, Charleston Division/WVU; "Repair of Surface Trauma: Hands and Face"—Jacques Charbonniez, M. D., Chief, Department of Plastic Surgery, CAMC;

"Major Trauma" (Panel Discussion)—"Initial Nursing Assessment of the Trauma Victim and the Plan of Action"—Peggy Trimble, R. N., Nurse Coordinator, Maryland Institute for Emergency Medicine, Baltimore; "Initial Surgical Assessment of the Trauma Victim and the Plan of Action"—James P. Boland, M. D., Professor and Director, Department of Surgery, Charleston Division/WVU, and Chairman, Department of Surgery, CAMC; "Initial Neurological Assessment of the Trauma Victim and the Plan of Action"—Peggy Carney, R. N., and Debbie Rectenwald, R. N., staff nurses, Department of Neurology, CAMC/General Division; and "Initial Orthopedic Assessment of the Trauma Victim and the Plan of Action"—Tony C. Majestro, M. D., Clinical Assistant Professor, Division of Orthopedics, Charleston Division/WVU.

The seminar meets the criteria for 13 hours of Category 1 credit toward the American Medical Association Physician's Recognition Award; and Category 1 CME credit has been requested from the American College of Emergency Physicians.

For additional information, telephone the Charleston Division's office of Continuing and Consumer Education at 304/345-2600 or 304/348-7617.

The Journal Gets Response From Romania

If there ever was any doubt about how extensively *The West Virginia Medical Journal* is read, it was dispelled in June when the editor received a request for a book to review from Bucharest, Romania.

The request came from Professor dr. Victoria Zinca in conjunction with *The Journal's* "Review A Book" column which offers a medical book to physicians after they submit a review.

In requesting the book, *Current Obstetric & Gynecologic Diagnosis and Treatment*, Doctor Zinca remarked that many of their books had been lost "in the devastating earthquake [of] March 4, 1977, which destroyed the majority of our libraries."

Editor's Note: West Virginia physicians who wish to help replace medical texts lost in the earthquake may send them to the following address:

Professor dr. Victoria Zinca, M.I.A.C.
Member of the International Academy of Cytology
P. Box 637
P. Office 1,70100
Bucharest, Romania

Cardiac Life Support Course Scheduled For Beckley

The West Virginia Heart Association is offering a program, "Advanced Cardiac Life Support (ACLS)," November 19-20 at the National Mine Health and Safety Academy in Beckley.

The program is designed to enhance the participant's knowledge in the area of emergency treatment of the patient with cardiac arrest, which may result in this person making a full recovery and returning as a useful member of society. It also is intended to train "advanced cardiac life support" instructors to continue such programs in West Virginia.

The class will be limited to 24 students and will be geared to physicians, nurses and paramedics. Participants must have successfully completed the basic life support course to be eligible. This course is approved for twelve (12) hours of Category 1 AMA and ACEP Continuing Education Credits. Application has been made for WVU Continuing Education Units and WVNA Recognition Points (16).

The course content will include: advanced life support; adjunct for airway and breathing (ventilation); adjunct for artificial circulation; monitoring and dysrhythmia recognition; defibrillation and synchronized cardioversion; intravenous techniques; essential drugs in emergency cardiac care; useful drugs; acid base balance; and stabilization and transportation.

The registration fee is $50 for physicians and $25 for nurses or paramedics, and will include the textbooks. Room and board at the Mine Academy will be $10 per day per person. For further information, please contact the West Virginia Heart Association, 211 35th Street, Charleston 25304, or call 346-5381.

Charleston Physician President Of Hearing, Speech Group

Dr. James Thomas Spencer, Jr., a Charleston otolaryngologist, has been elected President of the National Association for Hearing and Speech Action, a not-for-profit voluntary organization dedicated to improving services for persons with communicative handicaps.

James T. Spencer, Jr., M. D.

A board member of the association since 1973, Doctor Spencer served as President Elect last year. Founded in 1919, the National Association for Hearing and Speech Action is headquartered in Silver Spring, Maryland.

Doctor Spencer is on the staff of Charleston General Hospital and St. Francis Hospital. He was Chief of Otolaryngology at Charleston Memorial Hospital until the CAMC merger, and also for the years 1974 to 1976. He is an Associate Clinical Professor of Otolaryngology at West Virginia University in Morgantown.

A member of Phi Beta Kappa and Omicron Delta Kappa, Doctor Spencer is a graduate of Wake Forest College and Jefferson Medical College. During the Korean War, he served in the U. S. Navy for a year in Philadelphia and a year in Yokosuka, Japan. He is a Lieutenant Commander in the U. S. Naval Reserve.

Doctor Spencer is a Past President of the West Virginia Academy of Ophthalmology and Otolaryngology, and Gov. Arch A. Moore, Jr.,

appointed him an otologist member of the West Virginia Board of Hearing Aid Dealers to serve in 1974-76. He served as State Chairman of the Deafness Research Foundation's Centurion Club upon its inception until 1976.

MU School Of Medicine Helps In Rheumatology Clinic

A Rheumatology Clinic for treatment of persons with arthritis has been established by Marshall University's School of Medicine and Family Care Outpatient Clinic (FCOC), a teaching affiliate of the school.

The clinic is held each Tuesday morning at FCOC, 1801 6th Avenue, according to Dr. Robert W. Coon, Dean of the school.

Patients are seen by referral only, Doctor Coon said. They may be referred to the clinic either by a physician or by the Cabell-Wayne Division of the Arthritis Foundation, he added.

Dr. John C. Huntwork, MU Assistant Professor of Medicine and a rheumatology specialist, is conducting the clinics. Doctor Huntwork earned his M. D. degree from the University of Chicago Pritzker School of Medicine.

Prior to joining Marshall's faculty earlier this summer, Doctor Huntwork was a rheumatology instructor at the University of Kentucky Medical Center, where he served his residency and held a rheumatology fellowship.

"I'm sure that board members of the Arthritis Foundation's local division and Family Care share Marshall's pleasure in being able to provide this new service to area residents," Doctor Coon said. "This is one of the ways that establishment of a medical school benefits a community," he added.

Marshall Professor Elected By National Society

Dr. Frederick J. Lotspeich, Marshall University School of Medicine professor of biochemistry and departmental chairman, has been elected into the American Society of Biological Chemists.

Membership in the society is based on significant contributions to the biochemical research field, according to Dr. Alton Meister, society President.

A West Virginia native, Lotspeich joined the Marshall faculty this summer, having taught previously at the West Virginia University School of Medicine.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Sept. 8, 9	Morgantown	Hal Wanger Family Practice Conference
Sept. 14	Charleston	Oral Contraceptive Treatment
Sept. 16, 17	Charleston	Emergency Room Practice
Sept. 22-24	Morgantown	Second Annual Conference on Histological Techniques
Sept. 23, 24	Morgantown	Regional Meeting of ACP
Oct. 1	Red House	Second Allergy Workshop for Primary Care Physicians
Oct. 4	Charleston	Prophylactic Antibiotics Conference
Oct. 5	Wheeling	CIBA Medical Horizons Program on Hypertension
Oct. 7, 8	Morgantown	Cardiology Teaching Days
Oct. 8	Wheeling	Selected Topics in Internal Medicine
Oct. 12	Charleston	Community Medicine Seminar

Oct. 13	Charleston	Seminar on Health Manpower Education and Distribution
Oct. 13	Morgantown	Pediatric Day—Gastroenterology
Oct. 25	Wheeling	Fort Henry Academy of Medicine
Oct. 28, 29	Morgantown	Neurosciences Teaching Day
Nov. 3	Wheeling	The CME Postgraduate in Family Practice

Dr. George Pickett Becomes State Health Director

Dr. George Pickett was to assume the position of Director of the reorganized State Health Department on September 1. Doctor Pickett, a native of Morgantown, most recently was Director of the San Mateo, California, Department of Public Health and Welfare, and currently is President of the American Public Health Association.

Doctor Pickett heads a department that consolidated the old mental health department and its institutions, two general hospitals and charitable institutions formerly under public institutions, nursing home licensing and other health programs, into the health department.

He became Director of the San Mateo department in 1970. He previously was Public Health Director of the Detroit and Wayne County, Michigan, health departments. He also served as Assistant Chief in the Special Projects Section of the U. S. Public Health Service's cancer control program, and was Director of Chronic Disease Control for the Nebraska State Department of Health in the early 1960s.

Dr. George Pickett, left, new Director of the State Health Department, is shown with Governor John D. Rockefeller IV at the time of the announcement of his appointment by the Governor in July.

Doctor Pickett, who also was a consultant to the Eppley Cancer Research Institute in Omaha, Nebraska, is a nationally-recognized authority on cancer research. He has written a number of papers and publications on cancer, leukemia control and the health factors of smoking.

The new State Health Director said it's been his long-standing ambition to come back to West Virginia. He declared the state needs more primary care practitioners and needs to try a different mix of medical personnel to get health services to isolated areas.

He also stated that planning needs to be done to better utilize medical technology, adding that lower technology and higher technology are mismatched, with patients sometimes getting expensive, high-level technology treatment when they only may have a cold.

Doctor Pickett holds a bachelor's degree from Harvard University, an M. D. degree from McGill University and a master's degree in public health from the University of Michigan.

His father, Dr. Justus C. Pickett, retired as Chairman of the Division of Orthopedics at the West Virginia University School of Medicine, but continues his private practice in Morgantown.

Doctor Pickett was named to his position in July by Governor Rockefeller, who said that Doctor Pickett was the unanimous first choice of the Governor's search committee which was charged with recommending candidates for the $45,000-a-year post.

Convention Story Will Appear In October Journal

The 110th Annual Meeting of the West Virginia State Medical Association was being held at The Greenbrier in White Sulphur Springs as this issue of *The Journal* went to press.

The full convention story, including information concerning new officers of both the State Medical Association and Auxiliary, as well as heads of sections and affiliated societies and associations, will be carried in the October issue.

Dedication Of Medical Education Building October 12-14

The new West Virginia University Medical Center Education Building in Charleston will be dedicated during three days of activities, October 12-14, it was announced by the Charleston Division of WVU and the Charleston Area Medical Center.

The Medical Education Building, completed and occupied this summer, is located at 3110 MacCorkle Avenue, S. E., adjacent to the CAMC Memorial Division.

The dedication schedule will include medical meetings on Wednesday and Thursday, October 12 and 13, with the formal dedication ceremony to be held on Friday at 10 A.M. Governor John D. Rockefeller IV will be the guest speaker for the ceremony, with an open house for the public to follow.

Scheduled for 1 P.M. Wednesday is a "Community Medicine Symposium." The speakers will include Edward M. Bosanac, M.P.H., Research Associate, Health Services Research Group, WVU; Charles T. Holland, M. H. A., Unit Coordinator, Health Services Research Group, WVU; William Kissick, M. D., Professor of Public Health and Preventive Medicine, School of Medicine, University of Pennsylvania; and R. John C. Pearson, M. B., Professor and Chairman, Department of Community Medicine, WVU.

A program on "Health Manpower Education and Distribution: The Carnegie Commission Report" will be held on Thursday at 8:30 A.M. The speakers will be:

Don L. Arnwine, M. H. A., President, CAMC; Joseph S. Begando, M. D., Chancellor, University of Illinois Medical Center, Chicago; John T. Dunlop, Ph. D., University Professor of Economics, Harvard University; Loretta Ford, Ed. D., R. N., Dean, School of Nursing, University of Rochester;

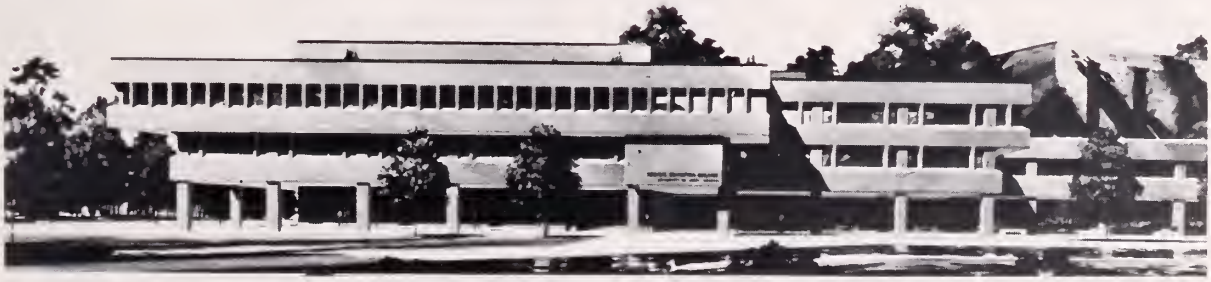
E. K. Fretwell, Ed. D., President, State University of New York College at Buffalo; and Member, Carnegie Council on Policy Studies in Higher Education, 1976; Robert J. Glaser, M. D., President, Henry J. Kaiser Family Foundation, Palo Alto, California; Eugene Mayer, M. D., Deputy Project Director, North Carolina Area Health Education Center; Alvin L. Morris, D. D. S., Executive Director, Association for Academic Health Centers, and J. Lowell Orbison, M. D., Dean and Director of Rochester School of Medicine.

Historical Sketch

Editor's Note: Following is a historical sketch of the Charleston Division/WVU and the Medical Education Building as supplied by the university and CAMC:

In 1972 and 1973, decisions were taken by West Virginia University and the Charleston Area Medical Center to develop both medical education and health science education programs in the City of Charleston, building upon hospital facilities and programs already in place. In continuing consultation and with significant support, moral, political and financial, from the citizens of Charleston and the Kanawha Valley, these programs have been planned, the essential facilities constructed, and an initial staff assembled to implement them. The dedication of the Education Building serves as a milestone in nearly a decade of swift development.

The concept of the Clinical Campus extending the patient base and the student capacity for the School of Medicine and the Medical Center of West Virginia University took shape in 1968 and was launched in 1970 with 16 hospitals com-



Shown above is a sketch of the new West Virginia University Medical Center Education Building in Charleston which will be dedicated during three days of activities October 12-14.

prising the West Virginia Joint Council of Teaching Hospitals. Further impetus was given by the publication in 1970 of the *Carnegie Commission Report on Health and the Nation's Needs*, and the subsequent selection of West Virginia University by the Federal Government to be one of the 11 universities in the United States to be awarded a contract for establishing an Area Health Education Center.

The West Virginia University Medical Education Building has been made possible by a two-million-dollar grant from the Sarah and Pauline Maier Foundation matched by four million dollars appropriated by the state. Farsighted community leadership has eventuated in the consolidation of the Charleston Area Medical Center by merger, and CAMC's affiliation with West Virginia University in support of a medical and health sciences education program designed for the future of the region and of the state.

All citizens can take pride in the developments now so well advanced, and feel gratitude to the civic-minded, future-oriented, generous, determined, and energetic leaders who have brought the idea of the clinical campus to fruition.

WVU Family Practice Conference To Be Held September 8-9

The third annual Hal Wanger Conference on Family Practice will be held on Thursday and Friday, September 8 and 9, at the West Virginia University Medical Center auditorium in Morgantown.

The conference is sponsored by the WVU School of Medicine's Department of Family Practice, its Office of Continuing Medical Education, and the West Virginia Chapter of the American Academy of Family Physicians.

Registration will begin at 8 A.M. on Thursday, followed by welcoming remarks from John E. Jones, M. D., Dean of the WVU School of Medicine.

The scientific program, beginning at 9 A.M., will include the following topics and speakers from the WVU faculty:

"Management of Premature and Delayed Puberty"—E. Noel McIntosh, M. D., Ph. D., Associate Professor of Obstetrics and Gynecology; "Office Assessment of Pulmonary Function"—N. LeRoy Lapp, M. D., Professor of Pulmonary Diseases; "Hypertension Update—Current Therapy, New Drugs and Side Effects"—Roland J. Weisser, Jr., M. D., Assistant Professor, Department of Family Practice; and C. Wayne Weart, Pharm. D., Assistant Professor, Department of Family Practice and School of Pharmacy;

"Genetic Counseling"—Stephen S. Amato, M. D., Ph. D., Associate Professor of Pediatrics; "Intrauterine Growth Failure"—O. Eugene Dement, M. D., Chief Resident, Obstetrics and Gynecology; and "Advanced C.P.R."—John J. Rick, M. D., Assistant Professor of Anesthesiology and Director of the Intensive Care Unit.

Friday Program

Registration again will begin at 8 A.M. on Friday. The program will begin at 9 A.M. with these speakers and topics:

"Degenerative Joint Disease"—Brian D. Houston, M. D., Fellow in Rheumatology; "Lupus Erythematosis"—Michael E. Crouch, M. D., Assistant Professor of Rheumatology; "Gout"—James F. Cipoletti, Jr., M. D., Clinical Assistant Professor and Practicing Rheumatologist;

"Rheumatoid Arthritis"—Anthony G. DiBartolomeo, M. D., Assistant Professor of Rheumatology; "Myocardial Infarction Rehabilitation"—David Z. Morgan, M. D., Associate WVU Dean and Professor of Medicine: "Patient Care After the Stroke"—Ludwig Gutmann, M. D., Professor and Chairman, Department of Neurology;

"Legal Aspects of Rehabilitation"—William E. Watson, J. D., Practicing Attorney; and "Musculo-Skeletal Rehabilitation"—Sandy L. Burkhart, Ph. D., Assistant Professor of Physical Therapy, and Rex H. Newton, M. D., Psychiatrist and Director, Harmarvile Rehabilitation Center.

This continuing medical education offering meets the criteria for 12 hours of credit in Category 1 for the Physician's Recognition Award of the American Medical Association; is acceptable for 12 prescribed hours by the American Academy of Family Physicians; and is approved for 1.2 WVU Continuing Education Units.

The conference was established at WVU in 1975 in honor of the late Dr. Halvard Wanger, Shepherdstown family physician. He was well known as the organizer and founder of the Potomac Shenandoah Valley Post Graduate Institute, which met yearly in Martinsburg from 1955 to 1974.

Conference On Prophylactic Antibiotics Scheduled

A conference on "Prophylactic Antibiotics" will be held on October 4 by the Charleston Area Medical Center and Charleston Division, West Virginia University Medical Center at the new Charleston Division/WVU Medical Education Building.

L. Barth Reller, M. D.

The building is located at 3110 MacCorkle Avenue, S. E., adjacent to CAMC Memorial Division.

The program will begin at 8:15 A.M. following remarks by Dr. Thomas W. Mou, Dean of the Charleston Division/WVU, and an introduction by the conference chairman, Dr. H. Bradford Hawley, Assistant Professor of Medicine and Chief, Infectious Diseases, Charleston Division/WVU.

The speakers and their topics will include:

"Antibiotic Usage for Prophylactic Purposes at CAMC"—Thomas A. Horsman, M. D., Resident in Medicine, Infectious Diseases, CAMC; "Antibiotic Prophylaxis in Modern Bone and Joint Surgery"—Paul A. Iannini, M. D., Assistant Chief, Infectious Diseases, National Naval Medical Center;

"The Role of Antibiotic Prophylaxis in Cardiac Surgery"—Ronica M. Kluge, M. D., Associate Professor of Medicine and Chairman, Division of Infectious Diseases, WVU Medical Center, Morgantown; "Prevention of Infective Endocarditis with Antibiotics"—L. Barth Reller, M. D., Associate Professor of Medicine and Director of Clinical Microbiology, University of Colorado Medical Center;

"Advances in the Prevention of Infections in Gynecologic Surgery by Antibiotic Prophylaxis" —Robert D. Patchell, M. D., Clinical Professor of Obstetrics and Gynecology, Charleston Division/WVU; "Preventive Antibiotic Therapy for Gastrointestinal Surgery"—William Gardner, M. D., Department of Medicine and Chief, Infectious Diseases, Akron General Hospital; and "Harmful Effects of Antibiotic Prophylaxis" (panel discussion)—Drs. Charles W. Stratton (moderator), Assistant Professor of Medicine and Chief, Microbiology and Serology, Charleston Division/WVU; James P. Boland, Professor and Chief of Surgery, Charleston Division/WVU; Robert L. Ghiz, Clinical Assistant Professor of Orthopedics, Charleston Division/WVU; and Doctors Hawley and Reller.

The program meets the criteria for five and one-half hours of credit in Category 1 of the American Medical Association's Physician's Recognition Award.

The fee will be $20, with no fee for residents and students.

For additional information, call the Office of Continuing/Consumer Education at 304-345-2600, ext. 244.

Allergy Workshop For Primary Care Physicians Scheduled

The second annual Allergy Workshop for Primary Care Physicians will be held on October 1 at Camp Bronco Junction at Red House (Putname County) by the Charleston Division/West Virginia University.

Registration will begin at 9 A.M., to be followed, at 10 A.M., with a welcome from W. Warren Point, M. D., Professor and Director of Medicine, Charleston Division/WVU.

Gerald Spaulding

The morning moderator will be Merle S. Scherr, M. D., of Charleston, Clinical Associate Professor of Medicine, WVU; and Medical Director, Camp Bronco Junction for Asthmatic Children.

The program will include presentations on "Current Drug Treatment of Asthma," by I. Leonard Bernstein, M. D., Practicing Allergist in Cincinnati, Ohio, and Clinical Professor of Medicine, University of Cincinnati; and "Allergenic Extracts," by Gerald Spaulding, Regional Manager, Hollister-Stier Laboratories.

During the afternoon session, Doctor Bernstein will speak on "Current Status of Immunotherapy," while Mr. Spaulding will discuss "Skin Testing."

Lewis H. McConnell, M. D., Clinical Professor of Medicine, Charleston Division/WVU, will serve as the afternoon moderator.

The workshop will adjourn at 3:45 P.M. following a panel discussion moderated by Joseph T. Skaggs, M. D., Clinical Professor of Medicine, Charleston Division/WVU.

Obstetrics-Gynecology Workshop September 16-17 In Beckley

The sixth annual Clinical Workshop in Obstetrics and Gynecology, a combined program for physicians, nurses and allied health personnel, will be held on Friday and Saturday, September 16 and 17, in Beckley in the Veterans Administration Hospital auditorium.

The workshop is sponsored by the West Virginia Obstetrical and Gynecological Society, the West Virginia Section, District IV, of the American College of Obstetricians; and the West Virginia Section, Nurses Association of ACOG.

The workshop will begin with a combined session on Friday at 12:45 P.M. following registration and viewing of exhibits that morning. The speakers and their topics will include:

"Management of the Pregnant Diabetic"—David J. S. Hunter, M. D., Associate Professor of Obstetrics and Gynecology, West Virginia University Medical Center, Morgantown; "Evaluation and Management of Women with Hyper-Prolactinemic Amenorrhea"—E. Noel McIntosh, M. D., Sc. D., Associate Professor of Obstetrics and Gynecology and Medicine, WVU; "The Use of Real-Time Ultrasound in Obstetrics and Gynecology"—Lewis H. Nelson, M. D., Department of Obstetrics and Gynecology, Bowman Gray School of Medicine, Winston-Salem, North Carolina;

"The Role of Ultrasound in Amniocentesis"—Doctor Nelson; and "Management of Ovarian Tumors"—Frank C. Greiss, Jr., M. D., Professor and Chairman, Department of Obstetrics and Gynecology, Bowman Gray School of Medicine.

The Friday afternoon schedule also will include business meetings of the West Virginia Obstetrical and Gynecological Society and NAACOG.

Concurrent sessions for physicians and nurses will begin at 8:30 A.M. Saturday. The program for the physicians' session will include:

"Prevention of Rh Sensitization in Massive Fetal-Maternal Hemorrhage"—Curtis D. White, M. D., Resident, Charleston Area Medical Center; "Pre-Term Termination of Pregnancy Due to Severe Hypertension"—Gorli Harish, M. D., Resident, CAMC; "Prolonged Follicular Phase and Risk of Fetal Anomalies"—Roy L. Butcher, Ph. D., Associate Professor of Obstetrics and Gynecology, WVU;

"Hanson's Disease in Pregnancy"—Jeffrey Maurus, M. D., Chief Resident, Obstetrics and Gynecology, WVU; Osmo-Onco Therapy, A New Treatment for Hypertensive Disorders of Pregnancy"—John Hitt, M. D., Resident, CAMC; and "Postoperative Morbidity Following Hysterectomy"—Joseph Wright, M. D., Resident, CAMC.

A combined session will begin at 11 A.M., with talks on "Clinical Presentations of Genital Embryologic Abnormalities," by Doctor Greiss; and "Maternal Infant Bonding," by Mary Charles Sutphin, C. N. M., Appalachian Regional Hospital, Beckley.

The workshop is approved for continuing medical education credit in Category 1 of the Physician's Recognition Award of the American Medical Associattion—and by ACOG, NAACOG, the American Academy of Family Physicians, and the West Virginia Nurses Association.

Physicians desiring additional information may contact Dr. Robert P. Pulliam of Beckley, program coordinator for the physicians' sessions.

Safe Drinking Water Act, Regulations Outlined

Editor's Note: Following is the text of a recent issue of "State of the State's Health," by Charles E. Andrews, M. D., then Acting State Health Director:

On June 24, 1977, the Environmental Protection Agency's (EPA's) Interim Primary Regulations (IPRs) for drinking water became official. The regulations were adopted as a part of the EPA's responsibilities under the Safe Drinking Water Act (SDWA).

Under the Act, the federal government—EPA—has the primary responsibility of establishing the national standards; the states are responsible for enforcing the standards and otherwise supervising public water supply systems and sources of drinking water. (A public water system is one that provides piped water for human consumption and that has at least 15 service connections or regularly services at least 25 people.) However, each state has the option of providing the surveillance, monitoring and enforcement activities to carry out the requirements of the Act and regulations.

State Responsibility

The Governor has expressed his intent that West Virginia, through the State Health Department, will assume primary responsibility for implementing the program. In this regard, the State Health Department intends to continue its role in analyzing the drinking water for most utilities so that a minimal impact will be felt by the utilities and their customers with regard to purchasing additional expensive analytical equipment and acquiring more technical per-

sonnel. The West Virginia Department of Health, Environmental Health Services Laboratory, will provide the necessary physical, organic and inorganic chemical analyses stipulated by the Act, while the State Hygienic Laboratory will perform all bacteriological analyses for systems which do not have access to the services of another state-certified laboratory. These principal state health laboratories were to be visited by EPA laboratory officials on July 27 for a preliminary certification survey.

Periodic Samples

The Act states an individual water supplier must periodically sample and test the water pumped to serve a community. If tests reveal that a national drinking water standard has been violated, that is, if there is too much of any substance for which a national standard has been set, a water supplier must take action to correct the situation and also notify the responsible state agency of the violation. One of the key sections of the Safe Drinking Water Act then is the requirement that water suppliers must notify their customers when their water systems are in violation of the regulations or have exceeded maximum contaminant levels (MCLs) within the categories of inorganic chemicals, organic chemicals and microbiological contaminants. In addition, excessive turbidity, which is the amount of suspended material in a water sample, will be closely monitored and checked. Such information could be quite useful in a situation such as the recent carbon tetrachloride spills in the Kanawha River. The purpose, therefore, is to increase public awareness of the problems that water systems face and the true cost of producing safe drinking water.

Whatever the added cost might be, individuals should keep these alternatives in mind: water that is safe to drink or the risk of disease or other harmful effects. It will take the combined efforts of the water supply personnel, the consumers, the state, and the EPA to reach the common goal of safe drinking water. It's a small price to pay for assuring individuals, communities, West Virginians and Americans that our water is safe to drink.

AAFP 1977 Scientific Assembly October 10-13, Las Vegas

As American medicine becomes more deeply involved in the current "age of accountability," the nation's family physicians are responding with better and more specifically useful continuing medical education. One of the U. S.'s best-established CME forums is the Annual Scientific Assembly of the American Academy of Family Physicians.

This year, the national family doctor group (which pioneered mandatory CME for its members) will stage one of its most complete programs ever. It will be held October 10-13 at the Convention Center at Las Vegas, Nevada.

A large delegation of West Virginia physicians will make the Las Vegas trip, with the group including Drs. Joseph A. Smith of Dunbar and Del Roy R. Davis of Kingwood, Delegates to the AAFP Congress from the Mountain State.

In acknowledgment of the growing impact of the nation's increasingly aging population, the scientific program will be keynoted by a definitive consideration of geriatrics covering "the medicine America forgot." This presentation will be made by author Dr. Alex Comfort, best known for his "Joy of Sex." The scientific program will open at 1:30 P.M., Monday, October 10.

The scientific meeting, whose theme, "30 Years of Caring," spotlights the 30th anniversary of the 38,000-member AAFP, will follow then with a wide variety of CME offerings within nine separate program divisions: medical lectures, continuing education courses, "dialogues," clinical seminars, live teaching demonstrations, programmed instruction courses, taping and strapping demonstrations, fractures demonstrations and scientific and technical exhibits.

Content highlights of the program divisions:

Medical Lectures—will include 17 speakers on practical, up-to-date information such as "The Child with a Heart Murmur," "Hypertension: 1977," and "Controversies in Breast Cancer: Diagnosis and Treatment."

Continuing Education Courses—29 subjects, such as hypertension, allergy and asthma, drug interaction, dermatology, and testing techniques for the American Board of Family Practice certification examination.

"*Dialogue*"—informal discussion involving approximately 100 physicians, conducted by one or more medical school faculty members. Fourteen "Dialogue" sessions are scheduled for the four-day Assembly.

Clinical Seminars—two-hour sessions limited to 18 physicians. The seminars present topics covering the spectrum of situations confronting today's family physicians.

Live Teaching Demonstrations—presented by distinguished medical school faculty members and practicing physicians. Closed-circuit color television cameras and television monitors will allow the audience to view such demonstrations

as breast self-examination, and biopsy and suture techniques.

Programmed Instruction Courses — courses presented on "teaching machines" or autotutors. The topics include alcoholism, contraceptive counseling and menstrual problems.

Taping and Strapping of Athletic Injuries Demonstrations—demonstrations of techniques and procedures that prevent athletic injuries and the straps and tapes which can be used to allow motion after injuries. They are demonstrated on a live model 10 times during the Assembly.

Fractures Demonstrations—methods of applying casts to simulated broken extremities presented by practicing physicians.

Scientific and Technical Exhibits—the exhibits provide a great source of information on research projects, new equipment, services and pharmaceuticals.

Family doctors will earn one hour of prescribed AAFP continuing education credit for each hour of participation in any element of the scientific program, except for the viewing of exhibits. The Academy requires a minimum of 150 hours of continuing medical education every three years in order to maintain membership. It was the first medical organization to require its members to take approved continuing education. Its 150-hour plan now has been copied by other organizations which have established mandatory programs, including several national organizations in and out of medicine and a number of state medical societies.

The weekend prior to the scientific meeting, the Academy's Congress of Delegates will meet to conduct official business of the 38,000-member Academy. The Congress will meet Saturday, Sunday, and Monday morning, with the final session highlighted by presentation of awards and election of officers. The Congress will meet at the Las Vegas Hilton, which is the Headquarters Hotel.

Reno Physician To Be President

The AAFP Fellowship degree will be conferred upon 1977 candidates in the auditorium of the Convention Center Tuesday night, October 11. At the accompanying inauguration of officers, Dr. John C. Kelly, Reno, Navada, will become President of the Academy.

A social highlight of the Assembly will be the President's reception and dance, honoring retiring President and Mrs. B. Leslie Huffman, Jr., Maumee, Ohio, and incoming President and Mrs. John C. Kelly. It is scheduled for Wednesday evening, October 12, in the Main Hall of the Hilton Convention Center.

Medical Meetings

Sept. 8-10—Am. Assn. of Obstet.-Gynecol., Hot Springs, Va.

Sept. 15-16—Medical Society of the District of Columbia, Washington, D. C.

Sept. 16-17—W. Va. Obstet.-Gynecological Society, Beckley.

Sept. 22-25—Acute Problems in Neurology (MCV), Irvington, Virginia.

Sept. 25-29—Kentucky Medical Assn., Louisville.

Sept. 27-30—Am. Roentgen Ray Society, Boston.

Sept. 28-30—Occupational Lung Disease (Am. College of Chest Physicians, WVU, Natl. Institute of Occupational Safety & Health), Morgantown.

Sept. 28-30—ASIM, Washington, D. C.

Sept. 30-Oct. 2—AMA Regional Meeting, Hot Spring, Va.

Oct. 2-6—Am. Academy of Ophthalmol. & Otolaryngol., Dallas.

Oct. 10-13—AAFP, Las Vegas.

Oct. 12-14—Dedication of WVU-CAMC Medical Education Building, Charleston.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 15-19—Am. Society of Anesthesiologists, New Orleans.

Oct. 17-21—ACS, Dallas.

Oct. 23-26—Indiana State Medical Assn., Indianapolis.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Oct. 30—Nov. 4—Am. Society of Plastic & Reconstructive Surgeons, San Francisco.

Nov. 5-10—Am. Academy of Pediatrics, New York City.

Nov. 6-9—Southern Medical Assn., Dallas.

1978

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

April 5-6—W. Va. Chapter, Am. Academy of Pediatrics, Wheeling.

April 7-9—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

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Presidential Address*

JOHN J. MAHOOD, M. D.
Bluefield, West Virginia, Immediate Past President, West Virginia State Medical Association.

THIS dissertation can be labeled the "Greenbrier Address" because, like Lincoln's Gettysburg speech, it will be short and to the point.

Permit me once again to introduce my family: my wife Norma Jean, and my daughters Kathleen, Jean and Julia, and let me thank them for their patience and understanding during this past year. Now for the good news. The Mahoods have enjoyed the year immensely, and wish to thank you for your faith in me by electing me President last August. I also want to thank the staff of the Charleston office: Charles Lewis, Custer Holliday, Mary Hamilton, Sue Shanklin and Mary Sue Thompson for invaluable assistance rendered beyond the call of duty. Our executive staff is splendid. Mr. Luke Terry provided us much needed assistance during the sessions of the State Legislature.

Our committees have done a good job this year—along with many individual members, upon whom we have called during legislative sessions and at other times. It's always difficult to single out individuals because it is impossible to think of everyone, but my special thanks go to Dr. David Bell and his Program Committee; Dr. Lyle Vincent and the Insurance Committee; Dr. K. Douglas Bowers, Jr., and his Committee on Medical Aspects of Sports; and Dr. Herbert Pomerance and the members of his Committee on Medical Education and Hospitals who have carried out so well the vitally important role of accrediting continuing medical education programs in our community hospitals.

Dr. Frank J. Holroyd and Dr. Charles W. Merritt provided admirable leadership for the Legislative Committee, and its members provided invaluable service. The Committee on Medical Economics under Dr. Harry S. Weeks, Jr., and Dr. Milton Nugent made another solid contribution toward our overall goal of better patient care, particularly through efforts of subcommittees headed by Drs. W. Alva Deardorff, Carl Roncaglione, Richard Rogers, John Markey, Ray Harron and Robert Ghiz. Good work by the cancer committee, under Dr. David Gray, and the Committee on Medical Scholarships chaired by Dr. Martha Coyner, is reflected in resolutions brought before the House of Delegates here at

John J. Mahood, M. D.

*Presented at the second and final session of the House of Delegates, 110th Annual Meeting of the West Virginia State Medical Association, the Greenbrier, White Sulphur Springs, W. Va., Saturday, August 27, 1977.

the Greenbrier. And then there are the old reliables, like the Constitution and ByLaws Committee and the Resolutions Committee, headed by Drs. George Callender and Richard Flood. Also, let's not overlook the great job done year after year by Drs. Joseph Skaggs and Ralph Nestmann in directing the year-around planning necessary for the highly successful Mid-Winter Clinical Conference which has become a January fixture in Charleston.

I'm certain that I have missed some who also worked hard and did much to further strengthen this Association over the past 12 months. But any omissions are certainly unintentional—and I cannot leave the general subject of committees without an admonition, and a new challenge for the future.

A quick look around at the world in which we live—and the responsibilities medicine must assume in giving this nation quality medical care—clearly indicates that while you have been working hard, you're going to have to step up the pace even more. We must stay constantly on top of what is happening in government and other circles—and we must have your input, through this Association's committee structure as well as by other means, to get leadership and direction in 1977 and 1978.

I would like to give a special "thank you" to all the members of our local societies for their thoughtfulness during my visits all over the state, and I regret that the cold and snow last winter prevented me from traveling to several counties.

I will conclude with a few thoughts of my own gathered during this past year as your President. We are a strong Association and growing stronger in numbers and involvement. We have a tremendous amount of untapped strength. Please get involved at the local, state and national levels. Give organized medicine your thoughts and support. We, as physicians, have a lot of talent and will gladly help state and local officials with medical problems if given a chance to do so.

We have been blamed for the high cost of medical care, but did you know that the cost of cosmetics in this country last year exceeded ten and one-half billion dollars? Forget about the tobacco and whiskey industries! Believe me, we are pikers. I would hazard a guess that the gross income of all the dermatologists in the country wouldn't approach the amount spent on *Noxzema* and *Vaseline Intensive Care!*

There are several things we must concentrate on in the future. We need a more positive and effective input in the legislative process. We need a simple and non-incriminating method to excise the "bad apples" from the ranks of medicine, and we certainly need legislative help in the malpractice crisis.

Thank you very much for your kind attention.

Simple Hysterectomy Is Inadequate Therapy For Invasive Cervical Cancer

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This paper has been written because there have been cases referred to West Virginia University Hospital in recent years where modality of the treatment chosen has differed from recommended treatment.

The purpose of this paper is to discuss the inadequacies of the simple hysterectomy to cure cervical cancer by demonstrating the generally poor survival rates of patients and by discussing the published reports on series employing this method and currently recommended treatment modalities.

THE generally accepted mode of treatment for patients with cancer of the cervix varies with the stage of the disease. All stages of invasive cancer of the cervix may be treated with radiation therapy. However, if the patient's status is suitable and the stage of the disease is I-B (cancer is not spread beyond the cervix), or very early Stage II-A (cervical cancer is spread only to the upper vagina), *Radical* (Wertheim) abdominal hysterectomy with bilateral pelvic node dissection may be performed instead. During radical hysterectomy, wall-to-wall pelvic dissection is performed and paravaginal and paracervical tissues are removed from the pelvic wall with at least three to four cm of vaginal cuff. Also, great pelvic vessels and the obturator spaces are cleaned of the main lymph-bearing tissues by sharp dissection.

During the *simple* hysterectomy, wall-to-wall pelvic dissection is not performed and paravaginal and paracervical tissues are not removed.

Material and Methods

From 1966 through 1975, 36 patients were referred to the Gynecology Service of West Virginia University Medical Center after having had simple hysterectomy for invasive cancer of the cervix. As indicated in Table 1, 25 of the 36 patients had the preoperative diagnosis of invasive cervical cancer. Yet, simple hysterectomy had been performed as intended primary treatment, although in the majority of cases reported in the literature which had simple hysterectomy for benign gynecologic diseases, invasive carcinoma of the cervix was a surprise finding during operation. As listed in Table 2, 26 of the above 36 patients had primary simple abdominal hysterectomy. One of these patients was alleged to have had radical hysterectomy, but review of the operative note indicated the removal of some pelvic lymph nodes with no mention of removal of paracervical, parametrial or paravaginal tissues. Seven of the patients received, by the current radiotherapy standards, inadequate radiation therapy by means of orthovoltage machines prior to simple hysterectomy.

Further treatment after simple hysterectomy was radiation therapy as shown in Table 3. Nineteen patients received radiation treatment post-hysterectomy and prior to recognized recurrence. Five patients received treatment after pelvic and vaginal cuff recurrences became manifested.

The type of radiation therapy given to those 19 patients following simple hysterectomy is shown in Table 4. Nine received only external radiation therapy; five received external and internal treatments, and two received only internal radium treatment.

One patient received only vaginal cone type or external radiation in order to stop bleeding in terminal care. The type of radiation in two patients is unknown.

As shown in Table 5, of the 19 that received radiation therapy, nine died and 10 are still alive. Four of the 10 alive received radiation treatment in less than 12 months. As shown in Table 6, if the seven patients that survived the simple hysterectomy after five years are counted, the survival rate will be 19 per cent. If it may be assumed that all 15 patients will survive for five years, the survival rate will be 41.6 per cent. This is far below the expected survival rates of early invasive cervical cancer. M. D. Anderson Hospital reported that Stage I-B cervical cancer carries a 90 per cent five-year cure rate.[1]

*This paper was written while Doctor Tunca was Assistant Professor and Director, Gynecologic Oncology, West Virginia University School of Medicine, Morgantown.

Discussion

Review of the literature has revealed that, where simple hysterectomy was the treatment of choice for invasive cervical carcinoma, it was associated with markedly lower survival rates in spite of whatever treatment modalities were used postoperatively.

Green[2] reported that only 23 of 84 (27.3 per cent) patients who had simple hysterectomy and subsequently were treated with either full radiation therapy or radical pelvic operations were alive at the end of five years.

Jones and Jones[3] reported a series of 36 women with early Stage I cervical cancer in whom all lesions were less than one cm in diameter and who were treated with simple hysterectomy. They observed a five-year cure rate of only 41 per cent.

Daniel and Brunswick[4] reported on 202 women with clinical cancer treated with a radical abdominal hysterectomy (Wertheim) as a primary treatment between 1947 and 1955. In at least 50 per cent of the specimens, it was clearly demonstrated by histological studies that simple total hysterectomy would not have removed all the malignancy.

TABLE 1

Preoperative Diagnosis of 36 Patients With Invasive Carcinoma of Cervix Treated By Simple Hysterectomy During 1966-1975

Invasive carcinoma of cervix	25
Carcinoma—*in situ*	2
Vaginal bleeding	3
Fibroids	1
Parametrial mass	1
Pain—abdominal	2
Unknown	2

TABLE 2

Types of Hysterectomy Performed

Simple abdominal	26
Radiation therapy + simple abdominal	7
Simple vaginal	2
"Radical" abdominal	1

TABLE 3

Additional Treatment With Simple Hysterectomy

Radiation prior to recurrence		19
Given within two months after operation	7	
Given two months after operation	5	
Unknown time	7	
Preoperative radiation		7
Radiation after recurrence		5
None or unknown		5

Green[2] strongly advises that after simple hysterectomy for cervical cancer in which there is no positive evidence of persistent tumor, a radical dissection of the parametrial, paravaginal and paracervical tissue with upper vaginectomy and pelvic lymphadenectomy should be performed. This procedure offers the best survival rates. He also reported that after a delay of more than four months, adequate treatment after simple hysterectomy for cervical cancer yields a five-year cure rate of less than 20 per cent.

Barber and Brunswick[5] suggest an immediate second operation for women given a simple hysterectomy and whose cancer is found to be invasive. They recommend a Wertheim operation or pelvic exenteration. In 243 patients treated by them, the five-year survival rate was 32 per cent.

A more recent report[6] on survival of the 148 patients who had been treated with radiation therapy, after inadvertent simple hysterectomy for invasive cervical cancer, is 47 per cent for five years. Although this survival rate is good, the authors explained that their patients were

TABLE 4

Type of Radiation Given to 19 Patients Following Hysterectomy

External only (Orthovoltage or Co^{60})	9
External and internal	5
Internal only	2
Vaginal cone	1
Unknown	2

TABLE 5

Survival Data After Radiation Therapy Following Simple Hysterectomy

Died		9
Within 12 months	2	
13-60 months	5	
After 60 months	2	
Still Alive		10
Within 12 months	4	
13-60 months	2	
After 60 months	4	

TABLE 6

Survival Data After Simple Hysterectomy For Invasive Cancer of Cervix

Died		21
Within 12 months	5	
13-60 months	11	
After 60 months	5	
Still Alive		15
Within 12 months	5	
13-60 months	3	
After 60 months	7	

young, in a state of general good health and had less advanced cervical cancers. Thus, these data and the brief review of the literature support the general impression held since Reis-Wertheim days that simple hytserectomy is contraindicated in the presence of invasive cervical cancer.

A review of the literature suggests that the reasons why simple hysterectomy is inadequate as treatment for invasive cancer may be either the contamination of the surrounding tissues with tumor cells at the time of operation or alterations in vascularity and lymphatic drainage following the operation.[6]

In view of these studies, and because it is still likely that a simple hysterectomy will be performed inadvertently upon women with early invasive cancer of the cervix, it is important to review how these occurrences can be minimized and what to do when they nevertheless happen.

Summary

During the 10-year period from 1966 through 1975, 36 women were referred to West Virginia University Hospital Medical Center following simple hysterectomy in the presence of invasive carcinoma of the cervix. Twenty-five of these 36 patients had received simple hysterectomy as intended primary treatment of their cervical invasive cancer. In the other 11 patients, invasive cervical cancer was unrecognized preoperatively and was a surprise finding in the surgical specimens. Discussion is centered upon the methods of treatment that achieve longer survival.

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Role Of Serotonin Studied

STUDIES that researchers hope may lead to prevention or control of certain forms of autism and severe retardation in children are reported in a recent issue of Archives of General Psychiatry, a publication of the American Medical Association.

The studies seek to determine the role of serotonin—a natural chemical found in the blood, gut, and specific areas of the brain—in relation to certain types of retardation and autism, reported Daniel X. Freedman, M. D., of the University of Chicago Pritzker School of Medicine.

Serotonin is elevated in the blood of 30 per cent of autistic children and 50 per cent of children with severe retardation, Doctor Freedman observed.

1977 Student Research Convocation West Virginia University School of Medicine

THE Thirteenth Annual Medical Student Research Convocation was held on April 5, 1977. The Convocation is conducted annually in honor of Dr. Edward J. Van Liere, Dean Emeritus of the West Virginia University School of Medicine, for his leadership in bringing the School of Medicine to full stature, his devoted interest in the students and his many scientific achievements through medical research. The E. J. Van Liere Award, consisting of an engraved medallion and $100, went to John A. White, Medicine I. The second prize of $50 was won by Jerry W. Froelich, Medicine IV, and the third prize of $25 went to Robert J. Pusateri, Medicine II. Publication of the abstracts in *The West Virginia Medical Journal* constitutes an important and much appreciated recognition of the research efforts of the medical students.

Roy L. Butcher, Ph. D., *Chairman*
Student Research Convocation Committee

Dosage and Response Time Correlation For Methyl Salicylate-Induced Neural Tube Defects In Nine-Day-Old Hamster Embryos

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THE temporal and spatial relationships essential to normal embryological development highlight the need for a teratogenic test which takes into account these variables. In successfully developing such a test, cranium bifidia (CB), hydrocephalus (HC) and the defect combination CB-HC were experimentally produced in nine-day-old hamster embryos through the administration of methyl salicylate (MS) to the mothers during pregnancy. The exact dosage and exact time of administration of MS is correlated with the type and percentage of the defect produced. Six dosage series (60 females each) with controls (50 females) were employed; the embryonic age at which the mothers were treated with MS ranged from 7 days (d) 9 hours (h) through 7d 22h; dosages from 175mg to 225mg/100 g body weight were employed (although these are toxic human doses, the emphasis here is one of timing); physiological saline was administered to controls. In addition to this, C^{14} labeled MS was administered to six females from each dosage series. Females were sacrificed at 9.0d embryonic age and the embryos removed for observation. The frequencies of CB, HC and CB-HC together ranged from 16.04 per cent to 73.43 per cent vs. 11.16 per cent for controls, 6.29 per cent to 26.32 per cent vs. 0.84 per cent for controls and 0.80 per cent to 21.05 per cent vs. 1.26 per cent for controls, respectively.

The results obtained for the 3,445 embryos surveyed for all defects and defect combinations showed several trends: (1) the frequency of the defect increases steadily with a decrease in embryo age at administration of MS, (2) even though dosage increased as embryo age increased, the percentage of the defects decreased, (3) although the highest dose, even though toxic, was administered at 7d 22h, the frequency of defects was not statistically different (chi square test at the 0.05 level of probability) from the spontaneously observed rate in controls, (4) in many cases a difference of only *one hour* in embryo age resulted in significant differences in the frequency of defects observed (i.e. 7d 12.5h vs. 7d 13.5h and 7d 21h vs. 7d 22h), and (5) autoradiographic studies point to the exclusive localization of MS in ectodermally derived nervous tissue. The methodology employed in this study allows for a more thorough evaluation of the potency of a teratogenic agent than previously applied methodologies and is illustrative of the degree of precision essential if the full potency of a teratogen is to be realized and correlated with the human system. (Supported by NSF-SOS Grant to J. A. White EPP75-09268).

Measurement Of Ejection Fractions: Comparison Of Cine And Single-Probe Radionuclide Angiocardiography

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PAUL B. BROWN, Ph. D.

THE purpose of the research was to develop an accurate, portable, and inexpensive single-probe radionuclide system and correlate the single-probe system with cine angiocardiography. A scintillation probe was interfaced to a mini-computer and programs were developed for real-time data collection, generation of ECG-Gated left ventricular ejection curves, and calculation of various measurements of left ventricular function (i.e., ejection fractions, time-interval analysis).

Twenty-four patients were injected with 12 mCi of a Tc99m labeled human serum albumin. Following equilibration of the label in the blood pool, the probe was positioned over the left ventricle and two recordings, representing more than 100 cardiac cycles, were made of the activity in the left ventricle. The computer divided the cardiac cycle into 10 msec intervals to generate an ejection curve from which the end-diastolic counts (EDC) and the end-systolic counts (ESC) were measured.

Ejection fraction (EF) is defined by the equation:

$$EF = \frac{EDC - ESC}{EDC - \text{Background}}$$

(Background = counts from outside of left ventricle.)

Of the 24 patients studied, eight were rejected due to technical difficulties. With the remaining 16 patients an empirical method of deriving background activity, 65 per cent of end-diastolic counts, was used to calculate ejection fractions. The correlation of this method with cine angiocardiography was $r = .42$. Background activity was measured in the last six patients studied. With these subjects the correlation with cine was $r = .93$. Thus, background measurements in each patient provide a more accurate correction factor.

Even though the population size, in the last group, is small ($n = 6$) the high correlation is impressive and would indicate that this technique merits further investigation. This non-traumatic and potentially non-invasive technique appears useful for serial evaluation of the acutely ill patient, follow-up studies in non-hospitalized patients and rapid screening of patients with suspected left ventricle disease.

Circulating Immune Complexes In Head And Neck Cancer

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ROBERT W. VELTRI, Ph. D.
PETER E. MAXIM, Ph. D.

THERE is evidence in the literature indicating that tumor-associated antigens (TAA) exist for a variety of human tumors. Such TAA have been implicated in tumors of the head and neck region with substantial evidence that the antigen is a herpes virus-coded antigen. A primary characteristic of a TAA is that it should be immunogenic in the host, thereby giving rise to specific antibodies and sensitized T-lymphocytes. It is conceivable that excess TAA in the presence of host antibody could result in the formation of circulating immune complexes (CIC) in the host. This study was undertaken to demonstrate whether CIC were present in the sera of patients with head and neck cancer and to determine whether changes in CIC levels occurred during the course of patient therapy.

Fifteen head-and-neck cancer patients admitted to West Virginia University Hospital were studied. Five of these patients had serial serum samples taken during the course of their therapy. Treatment of those patients who were followed through therapy included X-irradiation and/or surgery. The types of cancer presented by the sample group included 12 squamous cell carcinomas, two lymphomas, and one adenocarcinoma.

The Raji cell test (Theofilopoulos *et al*, 1974) was used to determine the presence of CIC in

the sera. A scale of 0 to 4+ was used in grading the samples for relative quantity of CIC.

Ninety-five per cent of the patients' sera tested was positive for CIC. Eighty per cent of the samples was scored at least 2+ positive and 27 per cent was scored at 4+ positive. Four of the five patients from which serial samples were taken showed a relative increase of CIC between pre- and post-therapy sampling. One showed a decrease in complex activity. Normal sera from six controls were consistently negative for CIC.

It was demonstrated that a significant number of head-and-neck cancer patients had CIC in their sera. However, at this time no conclusions can be made regarding the effect of therapy on CIC levels because of the qualitative nature of the scoring method.

Correlating this study's evidence of CIC in the sera of head-and-neck cancer patients with earlier implications of herpes virus-coded TAA in the sera of such patients, it may be postulated that the antigen source for the formation of CIC is such TAA. Considering the many studies indicating the ability of CIC to block the functions of T-lymphocytes, thereby negating a major host defense against tumor development, the above postulation seems to be worthy of further consideration.

Diagnostic Test For Familial Polyposis Coli Based On Fecal Neutral Steroids And Bile Acid Patterns

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FAMILIAL polyposis coli is a disease transmitted in a Mendelian dominant inheritance pattern. This disease, if left untreated, will develop into cancer of the colon. The feasibility of a diagnostic test for familial polyposis coli came from analysis of fecal bile acid and neutral steroid patterns in patients and control subjects.

The patterns of bile acids and neutral steroids in the feces of all subjects were determined in mg/g dry weight by gas-liquid chromatography and converted to percentages of the respective totals. Fourteen controls averaged 73 per cent conversion of cholesterol to coprostanol and 97.6 per cent conversion of primary to secondary bile acids, while 10 familial polyposis coli patients averaged 27.6 per cent and 80.7 per cent for the respective conversions. The patient and control groups were distinguished statistically by the Mann-Whitney U test in relation to the neutral steroid and bile acid percentages with P less than .001 in both cases. Less than 35 per cent coprostanol and less than 85 per cent secondary bile acids were designated as criteria for the diagnosis of familial polyposis coli. Utilization of family histories and the above criteria proved successful in the diagnosis of nine of the 10 patients and establishing all 14 controls as normals.

Study has begun on children (ages 2-13) with a family history of familial polyposis coli. The fecal bile acid and neutral steroid patterns of these children fall in the normal range with the above diagnostic test. Longitudinal studies may reveal changes in the fecal bile acid and neutral steroid patterns and the effect these changes have on polyp formation.

Ultrastructure Of Bushbaby And Tree Shrew Adrenal Medulla

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STEPHEN W. CARMICHAEL, Ph. D.
DUANE E. HAINES, Ph. D.
ROBERT L. ROBINSON, Ph. D.

ADRENAL medullary fine structure has been described for a number of animal species, but a paucity of information still exists on species considered phylogenetically important. The availability of prosimian primates as research material may provide good models for human analogues. It is for this reason that the ultrastructural study of the adrenal medulla of the lesser bushbaby (Galago senegalensis) and tree shrew (Tupaia glis) was initiated. Standard transmission electron microscopy techniques were employed.

Most ultrastructural features were similar to those reported for other mammals. One chromaffin cell type, demonstrating both dense-cored and light-cored granules, was observed. Nerve cell processes were numerous and extended between chromaffin cells. The nerve fibers were all surrounded by Schwann cell membranes and most were non-myelinated. Some myelin figures were observed. Collagen was in intimate association with the nerve bundles. One fortuitous section in tree-shrew tissue showed a large nerve bundle with extensive branching at approximately right angles to extend into surrounding tissue.

It has been shown that glutaraldehyde fixation with OsO_4 postfixation renders norepinephrine-containing granules more electron-dense than epinephrine-containing granules. Ultrastructural results from this study vs. biochemical results from bushbaby and tree-shrew tissue indicate that correlation of dark-colored granules with norepinephrine and light-cored vesicles with epinephrine can be unreliable. More rigorous histochemical criteria need to be utilized other than the granule core density.

Failure Of Indomethacin To Induce Closure Of Patent Ductus Arteriosus (PDA) In Prematures With Respiratory Distress Syndrome (RDS)

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MARTHA D. MULLETT, M. D.

This study was designed to ascertain the effectiveness of indomethacin-induced closure of patent ductus arteriosus in premature infants by its action of prostaglandin synthesis antagonism. Eleven premature infants with severe RDS, gestational ages between 27 and 33 weeks, were selected for indomethacin therapy using the same criteria for surgical ligation of PDA (continuous murmur, brisk pulses, congestive heart failure unresponsive to medical management, persistent tachycardia). Laboratory studies were performed to exclude pre-existing hepatic, renal, electrolyte, or bleeding abnormalities. Indomethacin was administered orally in nine patients and rectally in two patients. Clinical and laboratory evidence of toxicity was recorded following indomethacin treatment, as were characteristics of the PDA murmur and presence or absence of congestive heart failure.

All but two patients demonstrated transient cessation or diminished intensity of the murmur within 24 hours following administration of indomethacin, interpreted as ductal responsiveness to the drug. In only two of 11 cases was PDA closure permanent. Two additional infants experienced transient closure of the ductus, but subsequently developed evidence of recurrent ductal shunting 48 to 72 hours later. The PDA murmur persisted in the seven remaining patients. There were no detectable serious complications of indomethacin administration.

Indomethacin failed to induce closure of patent ductus arteriosus in 9/11 prematures with RDS. These findings are not in agreement with the recently reported successful results of two West Coast centers. This discrepancy may be attributed partially to later onset of congestive heart failure, thus later age of administration of the drug in our study sample.

Chemiluminescence Of Dog Alveolar Macrophages

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PING LEE, Ph. D.
PHIL MILES, Ph. D.
MARSHA SMITH, B. A.

Alveolar macrophages are free cells in the lung wall responsible for phagocytizing inhaled particulate matter. This study investigated the chemiluminescence process linked to the phagocytosis by dog alveolar macrophages. The macrophages were obtained by lavaging a dissected lung with .9 per cent saline, then centrifuging the suspension at 120G for five minutes. These cells were re-suspended in Hanks Basic Salt Solution with glucose and incubated for 15 minutes at 37°C. Boiled yeast particles (zymosan A) were then added to initiate phago-

cytosis, and chemiluminescence (CL) was measured in a liquid scintillation counter (Beckman LS345) with coincidence turned off.

It was found that plasma from the same animal was required for light emission to occur. CL increased with increase in zymosan particle-to-cell ratio. However, beyond a ratio of 5:1, the increment in CL was considerably less. Thus a ratio of 5:1 seemed the most efficient for the occurrence of CL. (The cell concentration was generally between 3.0-5.0 x 10^7 cells/ml with the zymosan concentration at 3.75 x 10^8 cells/ml.) All the remaining experiments were carried out with this particle-to-cell ratio. In an attempt to delineate the cellular mechanism of this CL process the effect of various drugs (metabolic inhibitors and inhaled drugs) were studied. DNP inhibited the CL whereas ouabain did not. This indicates that CL may be related to oxidative phosphorylation, but not to the Na^+ $-K^+$ pump of the cell. Addition of adenosine resulted in a dose-related inhibition. Both epinephrine and di-isoproterenol HCl are clinically used to treat asthma.

Introducing phamacological doses of epinephrine to adult dog macrophages resulted in an inhibition of CL, whereas di-isoproterenol caused an initial inhibition and a delayed stimulation of CL. The cellular mechanism involved in these drug effects were generally thought to be mediated through cyclic AMP formation. However, negative results were obtained by introducing CAMP. Therefore, the involvement of CAMP in this process is questionable.

These results illustrate the usefulness of CL in studying the effect of pharmacological agents on a cellular activity (phagocytosis) of the alveolar macrophages.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 1/2 by 11 in.) white paper. Wide margins (at least 1 1/4 in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Special Report

Merits Of A Pediatric Specialty—One Opinion

ELLEN HRABOVSKY, M. D.
Assistant Professor of Surgery and Pediatrics, West Virginia University School of Medicine, Morgantown.

PEDIATRIC surgery is a specialty born of need, as are all specialties. Children's surgery is not limited to the problems of an anatomic region, nor to the diseases of an organ system. Rather, children's surgery is an approach to diseases of an age group and should be performed by people with special interest and experience in, and special understanding of, the problems of that age group regardless of specialty designation.

The special nature of surgical diseases of childhood has been recognized for many years. In 1860, J. Cooper Forester of Guys Hospital in London published "The Surgical Diseases of Children." This was the first English work on this subject. In 1868, Holmes published a monumental, 687-page work entitled, "Surgical Treatment of Diseases of Infancy and Childhood." In that same year, the Boston Children's Hospital was founded and patterned after the hospital for sick children at Great Ormond Street in London. Boston Children's Hospital quickly developed an independent surgical service with its major initial interest being in skeletal disease.

In the 1920s, a class of surgeon emerged who devoted himself to children's surgery full time within a hospital setting. Several centers arose across the country, but Boston Children's, under the leadership of Ladd and then Gross, is the one most associated with the development of pediatric surgery as a specialty in the United States. Gross's textbook describing the experience of the Boston Children's Hospital is a classic for both content and style. When he wrote his "Surgery of Infancy and Childhood," there were four surgical services at the Boston Children's Hospital, including orthopedics, neurosurgery, otolaryngology and general surgery. All the people in each of those specialties limited their work to children's diseases.

When Gross wrote his first book, he saw little likelihood of the development of pediatric surgery as a full-fledged boarded specialty, but he was firmly convinced that each large community or teaching center should have a surgeon or small group of surgeons devoted entirely to the surgical treatment of the diseases of children. Now, there are approximately 300 pediatric surgeons in this country who have a certificate of special competence in pediatric surgery granted by the American Board of Surgery. There are 16 residency programs approved by the American Pediatric Surgery Association, and a pediatric surgery residency matching program. Gross' vision has grown beyond what he expected and the realization of that dream came when he was elected the first President of the American Pediatric Surgery Association in 1970, the first organization devoted entirely to pediatric surgery in this country.

In spite of this growth, many ask why. The general surgeon may protest that the cases a pediatric surgeon does he can do just as well, and this is probably true in many cases. Some other surgical specialties fear an overlap of interests, and this, too, is true in some cases. But, the technical aspects of a given procedure are very often the least significant part of that child's care. The problems of the neonate are so different from those encountered at any other age that this in itself justifies a surgeon with special knowledge of the neonate. Additionally, a pediatric surgeon is also aware of the totally different behavior of childhood tumors. Adult methods don't work: a mutilating or life-threatening operation is not justified in the child for the purpose of eradicating tumor. Adult techniques also fail in the management of the seriously injured child. Children are different.

The pediatric surgeon hopes to insure the best possible care to all children requiring operative management by the people best qualified to deliver that care. The surgeon dealing with children can never forget growth and development because it is happening before his very eyes. A static weight in an infant is weight loss, and actual weight loss is a serious problem. This demands that the surgeon be skilled in all aspects of infant nutrition, both oral and intravenous, and be ready to use those methods aggressively. A child's metabolic turnover per unit of weight is much greater than the adult's. A small infant's

metabolic day is about eight hours long, compared to the adult 24-hour day. Therefore, to provide care only equal to the sick adult who is seen once or twice a day, the sick infant must be seen three to six times a day. This only provides comparable care—nothing extra!

The small child presents technical difficulties not faced in adults, and this in itself often leads to substandard care because many who would not hesitate to insert appropriate monitoring devices in an adult are incapable of providing the same services for the sick or injured child. The changing psychology of the child from infancy to adolescence in itself is a problem which makes children quite different creatures requiring a different approach than that of the adult.

To quote from the introduction to the latest edition of the two-volume textbook of *Pediatric Surgery* edited by Ravitch, Benson, Mustard and others, "One can no longer shrug off errors of diagnosis, technique and management in these young patients. Particularly in the first year of life, there has often been a tendency for the surgeon to anticipate failure and for his medical colleague to be consoling when this occurs. This misdirected charity would not be offered and would not be accepted by the conscientious surgeon who loses a patient in the prime of life with a straightforward surgical problem. Yet there have often been few evident pangs of conscience over the death of a neonate who succumbed unnecessarily to complications following an operation upon any of the major correctable anomalies. The varying incidence of surgical conditions in children and in adults; the varying response of children to the same disease; the rarity of some conditions, and the occurrence in the newborn of lesions incompatible with life unless corrected and therefore not seen in later years, all plead for management by those specially interested in these problems and specially prepared to meet them."

A pediatric surgeon must set standards of excellence for the surgical care of infants and children. What is pediatric surgery? It is the joy of restoring to normal life an infant who would have died of his congenital anomaly. It is the heartache of seeing a beautiful four-year-old die because a drunken driver lost control and ran up onto the sidewalk. It is the humor of a seven-year-old bargaining to be good while his stitches are removed if one will listen to his joke afterward. It is the frustration of the retarded or multiply-deformed child. It is the ego-trimming that a child's honesty provides. It makes life worth living.

Not to be covetous is money in your purse; not to be eager to buy is income.

—Cicero

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THE REGISTRATION FEE of $20 for the entire conference, including the Saturday night dinner, will be charged all registrants except nurses, medical students, interns and residents. Dinner tickets for the latter registrants, spouses and other guests will be available at the registration desk. Advance registration is requested, and please make checks payable to "WEST VIRGINIA STATE MEDICAL ASSOCIATION."

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FOR ADVANCE REGISTRATION, please complete the form below and mail to: WEST VIRGINIA STATE MEDICAL ASSOCIATION, P. O. BOX 1031, CHARLESTON, W. VA. 25324.

- -

Please register me for the Eleventh Mid-Winter Clinical Conference in Charleston, W. Va., January 27-29, 1978. My $20 registration fee is (is not) enclosed.

Name (please print)	*Specialty*
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A message from . . .

The President

COOPERATION WITH REASON

In recent weeks, we have had perhaps unprecedented contact with state government, and particularly with those working in the general area of health affairs in the Governor's Office.

We welcome that contact, and we want to provide what cooperation and assistance we can to those working on programs for the benefit of West Virginians. In fact, we want the Governor's staff and others to seek our opinions.

At the same time, however, we shall need to be informed to the greatest possible degree with regard to just what, from a specific standpoint, the goals of the present administration might be. We would be doing less than our professional duty if we took any other view.

And while we stand ready to provide what cooperation and input we can, we also shall clearly and positively reserve the right to speak out as strongly as we consider appropriate and necessary on any issues we, as physicians, feel are vital to assuring the best possible medical and health care in this state.

It is the physician who treats the patient. His rights to function as he is trained, and in a manner guided by his professional judgment, must not be impeded in that regard. Cooperation, yes. But insistence upon basic freedoms in medical practice, also yes—and most emphatically.

Joseph A. Smith, M.D.

Joseph A. Smith, M. D., *President*

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

LAETRILE

"Tired of doctor bills? Well, step right up, folks, and get your Doctor Doe's Dandy Detoxifier. Scientific tests have shown that the contents of this bottle have in many cases made cancer disappear. Swollen arthritic joints have returned to youthful appearance after being massaged with Doctor Doe's Dandy Detoxifier. Do you have a slipped disc? Back misery? Lumbago? No product has ever been shown to produce quicker relief from these and other conditions when used as directed. Have other problems? Try Doctor Doe's, the miracle detoxifier. And listen, folks. This product is guaranteed! Guaranteed to harm no one. Scientific tests reviewed by the United States Food and Drug Administration have proved the fact ————"

Outlandish? Yes. Script for a future TV commercial? Quite possibly. Illegal? No, not if the sale and use of laetrile is legalized. A precedent will then have been set. Proof of efficacy will no longer be required. The only requirement will be that the product is safe. That it will harm no one.

What a golden opportunity for hucksters and con-artists, grandchildren of snake oil vendors! Bottling facilities can be set up in any entrepreneur's basement. And it will all be quite legal.

It is unfortunate that the first major public reaction to consumerism has taken this form. Most doctors would agree that consumerism has gone too far. That it is insulting in its paternalistic fervor. That it is inappropriate to regard the American public as an idiot child.

Patients suffering from cancer, and their families, laboring under the anxiety of their cruel affliction, hoping pathetic hopes for magical cures, for Divine or any other intervention, are incapable of exercising even reasonable judgment in regard to their affliction. To protect these people from cynical and heartless promoters of worthless nostrums by insisting that the product being promoted show some indication of efficacy is a far cry from legislating mandatory automobile airbags for those who would rather spend their money on fancy hubcaps.

It's a hunting license in a game preserve. A fishing license in a trout hatchery.

Congressmen, the FDA and state legislators are being pressured to legalize the sale and use of laetrile. It is an emotional, heart-tugging argument that is being used: "Why should I not be allowed to grasp even at straws when I can see nothing more substantial on the horizon? Why do you deny me hope?"

The answer is that in laetrile hope is in vain. Hope lies in surgery, radiation and chemotherapy, the only therapeutic modalities having shown proven effectiveness.

Those who deny hope, such as laetrile promoters, are the exploiters of human misery. By glib talk and promotion of false hopes, they entice anxiety-ridden, thus gullible, cancer victims away from the only true hope available to them.

We must not tolerate, let alone offer a government stamp of approval, to this sort of exploitation.

THE USE OF ASPIRIN

Within recent years, several articles have been written concerning the use of aspirin. It has even been mentioned that it could be considered a dangerous drug. Weiss[1] has pointed out that aspirin in doses of one to three grams per day will induce gut bleeding in about 70 per cent of normal subjects, which eventually may result in an iron-deficiency anemia. He mentions further that aspirin inges-

tion can cause acute and massive gastric hemorrhage, although he observes that the evidence for the latter statement is not entirely clear.

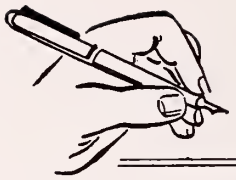
He also emphasizes that aspirin may induce asthma, the most serious of its adverse reactions. It appears that attacks can be produced by small amounts of aspirin, which may cause laryngeal swelling, abdominal pain, and shock. Death may occur within a short time unless appropriate measures are immediately instituted. Fortunately, this condition is rare, and occurs probably in less than 0.2 per cent of the general population. However, the incidence may be from two to four per cent in patients with bronchial asthma. Other adverse reactions may appear, such as skin eruptions, transient albuminuria, and nephrotoxicity. He mentions also that aspirin ranks second only to barbiturates for the purpose of suicide.

Despite these adverse reactions to aspirin, Doctor Weiss states that, considering the very low incidence of serious side-effects, the advice to "take two aspirins and call me tomorrow" still seems reasonably safe.

In the section dealing with drug evaluations in *The Journal of the American Medical Association*,[2] attention is called to most of the adverse reactions of aspirin which have been previously mentioned, but stress is laid upon the importance of the use of this preparation in clinical conditions. Emphasis is laid upon the fact that it is a widely used drug as a mild analgesic agent and valuable in certain types of headaches, arthralgia, and neuralgia. It is of special value in the treatment of rheumatic disease. Finally, mention is made that when drug therapy is indicated for reduction of fever, aspirin is one of the most effective and safest drugs.

The author of this essay appreciates that aspirin should not be administered to everyone, because there are a few individuals who are hypersensitive to it, especially those afflicted with asthma, hay fever or nasal polyps. Moreover, aspirin should not be given to people who have gastric or duodenal ulcers. He does wish to stress the fact that it is a most valuable drug, for it is an analgesic, antipyretic and anti-inflammatory agent. The author agrees with a statement made recently in an editorial in *The Journal of the American Medical Association*:[3] "There always will be an irreducible minimal number of people who get ill from drugs; weighing that risk against the benefits is part of medical practice."

1. Weiss HJ: *JAMA* 229:1221, 1974.
2. Drug evaluations. *JAMA* 1971, etc.
3. Editorial. *JAMA* 237:898. 1977.



Our Readers Speak

Legendary Plane Tree Survives

In 1973, the Clarksburg Veterans Administration Hospital received a most unique gift from the Schering Corporation in the form of a small, foot-high, slip of a tree handsomely contained in a beautifully embossed Grecian urn. This was no usual sapling, but rather one from the Island of Cos in the Aegean Sea and propagated from the ancient Plane Tree under whose branches legend leads us to believe Hippocrates (460-377 B.C.), the father of medicine, taught his pupils.

This ancient Plane Tree, now over 2,000 years old, with a massive trunk measuring 45 feet in circumference and vast spreading limbs supported by marble columns, is a close relative of our American Sycamore and is called *Plantanus orientalis*. Our Sycamore is termed *Plantanus occidentalis*, while there is yet a third variety, the *Plantanus acerifolia*, the tall, stately specimen found so often in the London parks.

Each fall, the massive Plane Tree on Cos sheds millions of seeds, some able to germinate, but the vast majority infertile. Only recently, using a method of soft x-ray, Dr. Oszkar Sziklai, Professor of Genetics at the University of British Columbia, was able to identify the fertile seeds. Using these seeds, Doctor Sziklai and Dr. William C. Gibson, professor of the History of Medicine at the same university, raised several thousand saplings which have now grown into good-size trees . . .

The Schering Corporation, hearing of Doctor Gibson's desire to propagate the *Plantanus orientalis* in America and his interest in the Medical Foundation of Cos, distributed a number of saplings to various teaching hospitals and university centers. Ours arrived in the summer of 1973, fortunately accompanied by detailed instructions as to care and planting. The sapling was placed in the office of the hospital director, Mr. Alfred Zamberlan, but initial results were very discouraging. In spite of meticulous care and nourishment, the few leaves withered and died, leaving only a stark, barren stem. At this point, Mrs. Zamberlan, who is now herself a doctor of medicine, took over, placed the tree in her sunroom and nursed it back to health. A year later, the two-foot-high sprig was transferred to the hospital grounds where it has weathered two severe winters . . .

Our *Plantanus orientalis*, unlike its Virginia neighbor whose picture was recently in the Virginia Medical Monthly and is some 15 feet tall,[1] is still a comparative dwarf of only four feet. Still, the West Virginia winters are much more inclement than the weather in the Richmond area . . . Hopefully, in the thoughts expressed by Dr. Harry J. Warthen,[2] it will live as long as its ancestor of Cos and continue to thrive in the year 4,500 A.D.

1. Warthen HJ: Editorial. *Va Med Monthly*, p. 727, Oct 1976.
2. Warthen HJ: Editorial. *Va Med Monthly*, p. 967, Oct 1973.

Reverdy H. Jones, Jr., M. D.
Veterans Administration Hospital
Clarksburg, West Virginia 26301

GENERAL NEWS

Doctor Smith Assumes Presidency Of State Medical Association

Dr. Joseph A. Smith, a Dunbar family physician, was installed by the West Virginia State Medical Association as its President at the concluding session of the House of Delegates during the 110th Annual Meeting Saturday, August 27, at the Greenbrier in White Sulphur Springs.

The convention began with a meeting of the Council on Wednesday, August 24. Registration totaled 486 and included 354 physicians.

Doctor Smith was installed by Dr. John J. Mahood of Bluefield, the retiring President, who had delivered the traditional President's address a few minutes earlier. The text of the address appears in the scientific section of this issue of *The Journal.*

Doctor Mahood automatically became Chairman of the Council for the new Association year, succeeding Dr. Jack Leckie of Huntington.

Other New Officers

Elevated to President Elect from Vice President was Dr. Robert D. Hess of Clarksburg, who will assume the Presidency at the 1978 meeting, also scheduled at the Greenbrier next August 23-26. Doctor Hess, a family physician, is Director of Medical Education at United Hospital Center in Clarksburg.

Dr. Stephen D. Ward of Wheeling was elected Vice President and Dr. Kenneth G. MacDonald of Charleston was re-elected to his 13th one-year term as Treasurer. Doctor Ward is a psychiatrist and Doctor MacDonald is a surgeon.

Dr. Frank J. Holroyd of Princeton was re-elected as a Delegate to the American Medical Association, with Dr. Jack Leckie of Huntington elected as Alternate Delegate.

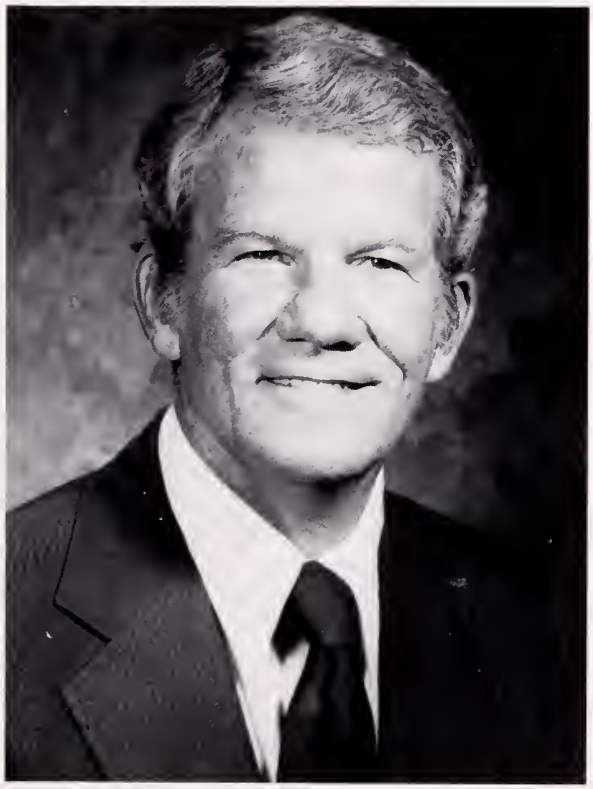
Four new Council members were elected, with two other physicians re-elected to two-year terms. There being no nominations for the Councilor for the Fifth District, President Smith named Dr. Dewey F. Bensenhaver of Petersburg to serve until the 1978 Annual Meeting. He succeeds Dr. Robert W. Bess, Jr., of Piedmont, who was not eligible for re-election.

The other new Councilors are Drs. David H. Williams of Weirton, Ralph W. Ryan of Morgantown, Roger Paul Bennett of Upperglade and John B. Markey of Charleston.

Re-elected were Drs. M. V. Kalaycioglu of Shinnston and David F. Bell, Jr., of Bluefield.

Holdover Councilors whose terms will expire in 1978 are Drs. Joseph T. Mallamo, Fairmont; L. Walter Fix, Martinsburg; Wallace B. Murphy, Grafton; Lyle D. Vincent, Parkersburg; Winfield C. John, Huntington; Carl J. Roncaglione, Charleston; Walter E. Klingensmith, Beckley; and Ray M. Kessel, Logan.

Under the terms of the Association's Constitution, Doctor Leckie, the Council Chairman last year, becomes Councilor-At-Large for 1977-78; and Dr. William E. Gilmore of Parkersburg, the Association Past President three years removed, will serve as Junior Councilor-At-Large during this period.



Robert D. Hess, M. D.
President Elect

New officers of the West Virginia State Medical Association were elected during the 110th Annual Meeting, August 24-27, at the Greenbrier in White Sulphur Springs. Newly elected and other officers shown above are, front row (from left), Drs. John J. Mahood of Bluefield, Immediate Past President and now Chairman of the Council; Kenneth G. MacDonald of Charleston, re-elected Treasurer; Joseph A. Smith of Dunbar, President; Robert D. Hess of Clarksburg, President Elect, and Stephen D. Ward of Wheeling, Vice President. In the second row are (from left) Drs. Jack Leckie of Huntington, Councilor-At-Large and elected as an Alternate Delegate to the American Medical Association; L. Walter Fix of Martinsburg, holdover councilor; Roger Paul Bennett of Upperglade, newly elected to Council; M. V. Kalaycioglu of Shinnston, re-elected to Council; Ralph W. Ryan of Morgantown, newly elected to Council, and Frank J. Holroyd of Princeton, re-elected as a Delegate to the AMA. Also elected (not shown) to Council were Drs. David H. Williams of Weirton and John B. Markey of Charleston. There being no nominations for the Councilor for the Fifth District, President Smith named Dr. Dewey F. Bensenhaver of Petersburg to serve until the 1978 Annual Meeting. Dr. David F. Bell, Jr., of Bluefield also was re-elected to Council.

Amendments And Resolutions

In other action during its two sessions, the House of Delegates:

—Approved bylaws changes to provide specifically for active membership for physicians in residencies at reduced dues; to make provisions for waiving dues of active members temporarily incapacitated by illness; and to broaden the retired membership category to cover active members who might choose to go into early retirement because of illness or other reasons.

—Adopted a constitutional amendment to clarify procedure for the President Elect to advance to President; for election of Councilors, and to remove constitution and bylaws inconsistencies regarding the Junior Councilor and Executive Secretary positions.

—Adopted eight resolutions, including one increasing the value of medical scholarships from $1,000 to $1,250 per year and making Association scholarships available to students enrolling "in any educational institution in West Virginia granting an M. D. degree."

Among other resolutions adopted were those which:

—Call for the Association to "undertake with the help of allied groups to document the need for a physical rehabilitation center" for the state;

—Direct that amendments to the constitution and bylaws leading the way for medical student membership and participation in the Association be prepared;

—Urge local societies to refuse to adjudicate the differences between the fee submitted by a physician and the amount the insuror (third party) agrees to pay the patient, but encourage component societies to adjudicate grievances between patients and physicians;

—Call for the Association to continue work with the West Virginia Hospital Association toward resolving policy differences in proposed certificate of need legislation, with attention to "the clear policy of the American Medical Association and the West Virginia State Medical Association that the private practice of medicine should be exempt from any certificate of need requirements."

Constitution and bylaws amendments, and resolutions, adopted by the House are covered in detail elsewhere in this issue of *The Journal.*

The President

Doctor Smith, a native of Sutton, was educated in public schools there, then attended Glenville State Teachers College prior to World War II. In 1941-45, he served in the U. S. Army Air Corps, with his tour of duty as a fighter pilot including 18 and one-half months in the China-Burma-India Theater. He left active duty with the rank of captain.

Doctor Smith received A. B. and B. S. degrees from West Virginia University in 1948, and an

M. D. degree from WVU and the Medical College of Virginia in Richmond in 1950. After an internship at Charleston General Hospital, he entered practice in Dunbar in 1951, and has had his office there since that date.

He was President of the Kanawha Medical Society in 1967, then was a member of the Association Council from 1967 until 1972. He was elected Vice President of the State Medical Association in 1975, and President Elect in 1976.

The new President also is a Past President of the West Virginia Chapter, American Academy of Family Physicians; and serves as one of the chapter's two delegates to the American Academy of Family Physicians. His other professional activity has included the presidency of medical staffs at Mountain State Hospital in Charleston, and Herbert J. Thomas Memorial Hospital in South Charleston.

He is married to the former Helen Fisher of Dunbar, a daughter of Dr. and Mrs. H. H. Fisher. They are parents of three children, Joseph A. Smith, Jr., of New York City, and James Fisher Smith and Mary Elizabeth Smith of Dunbar. Miss Smith is a student at Hollins College in Roanoke, Virginia.

The President Elect

Doctor Hess, a native of Bridgeport, was elected to two terms on the Association's Council beginning in 1973. A Diplomate of the American Academy of Family Physicians, he is a member of the Board of Directors (District V) of the AAFP.

He is a member of the Association's Medical Education and Hospitals and the Military Medical Affairs committees, and has served on the Medical Scholarships and West Virginia University Liaison (as Chairman) committees.

The President Elect was Chairman of the Program Committee for the 1976 Annual Meeting, and currently is Vice Chairman of the West Virginia Joint Council on Teaching Hospitals.

Doctor Hess was graduated from WVU and received his M. D. degree in 1958 from the Medical College of Virginia. He served his internship and residency at Memorial Hospital in Charleston.

The Vice President

Doctor Ward is Editor of *The West Virginia Medical Journal* and Chairman of the Association's Publication Committee. A member of the Association's Council for four years, beginning in 1969, he currently is a member of the American Medical Association's Council on Legislation.

He received his M. D. degree in 1964 from the University of Pittsburgh School of Medicine. He served an internship at Mercy Hospital in Pittsburgh, and a residency at the Western Psychiatric Institute and Clinic of the University of Pittsburgh School of Medicine from 1955 to 1958.

Doctor Ward, who entered practice in Wheeling in 1962, is a Past President of the Ohio County Medical Society. He serves on the Association's Legislative, Mental Health, and Public Service committees.

Dr. John H. Budd (center photo) of Cleveland, President of the American Medical Association, was the speaker for the first session of the House of Delegates during the 110th Annual Meeting of the State Medical Association, August 24-27, at the Greenbrier in White Sulphur Springs. In the left photo, also during the initial House session, Dr. John J. Mahood (left) of Bluefield, then Association President, presents to Dr. David Z. Morgan, Associate Dean at the West Virginia University School of Medicine, a check for $17,560.16. In the right photo, Doctor Mahood presents to Dr. Robert W. Coon, Dean of the Marshall University School of Medicine, a check for $985. The checks represented an annual contribution by West Virginia physicians and the Auxiliary to the medical schools through the Education and Research Foundation of the AMA.

First House Session

Dr. John H. Budd of Cleveland, President of the American Medical Association, was speaker for the first session of the House of Delegates on Wednesday afternoon.

Doctor Mahood presented to Dr. David Z. Morgan, Associate Dean at the WVU School of Medicine, a check for $17,560.16; and to Dr. Robert W. Coon, Dean of the Marshall University School of Medicine, a check for $985, during the initial session. The checks represented an annual contribution by West Virginia physicians and the Auxiliary to the medical schools through the Education and Research Foundation of the AMA.

Opening Session

Governor John D. Rockfeller IV addressed the physicians during opening exercises preceding the first general scientific session on Thursday morning.

Technical Changes In Bylaws Adopted By Delegates

Two amendments to State Medical Association Bylaws designed to provide specifically for active membership for physicians in residencies at reduced dues; to make provisions for waiving dues of active members temporarily incapacitated by illness; and to broaden the retired membership category to cover active members who might choose to go into early retirement because of illness or other reasons now are "in the book."

The amendments were adopted by the Association's House of Delegates during the recent annual meeting at the Greenbrier in White Sulphur Springs. Also adopted was a Constitutional amendment, first introduced in 1976, necessary to clarify procedure for the President Elect to advance to President; for election of Councilors, and to remove Constitution-Bylaws inconsistencies regarding the Junior Councilor and Executive Secretary positions.

The House tabled for one year, for additional study, a proposed bylaws amendment to provide specific guidelines under which specialty sections and societies established by the House within the general State Medical Association framework should be organized and carry out educational and other activities.

The one-year delay developed primarily because of agreement among delegates that language requiring medical education programs needed to be studied further, and reshaped.

Here are the bylaws amendments specifically as they were adopted, with new language shown in italics and material deleted from earlier versions indicated by parentheses:

Amend Chapter I, Section 6 to read as follows:

Sec. 6. The honorary membership of this Association shall consist of those physicians who have attained outstanding eminence in the medical profession; have been nominated for honorary membership by their component societies; and have been elected to such membership by a majority vote of the Council and the House of Delegates of the Association.

The retired membership of this Association shall consist of those physicians who have been

In the left photo, Dr. John J. Mahood (left) of Bluefield, then President of the State Medical Association, checks the program for the 110th Annual Meeting of the Association with Governor John D. Rockefeller IV. Governor Rockefeller addressed physicians during opening exercises preceding the first general scientific session. In the right photo, Dr. George J. Hill II (second from right) of Huntington, moderator for the first general session, is shown with the speakers for a symposium on "Management of the Multiple Trauma Patient." They are, from left, Drs. Edwin C. James of Grand Forks, North Dakota; Charles M. Davis, Jr., and John J. Rick, both of Morgantown, and Thomas W. Langfitt, Philadelphia.

active members (of a state medical association for twenty-five (25) or more consecutive years.) but have retired from professional activity. Nominations for this category shall be forwarded by the appropriate component societies to the executive secretary for submission to Council for election.

Honorary and retired members shall be exempt from the payment of dues or assessments. They shall have the privilege of the floor in any open session of the Association, but shall not have the right to make or second motions, to vote, or to hold any elective office in this Association, except that they may hold elective or appointive committee membership.

(The effect of this amendment is to broaden the retired membership category to those active members who might go into early retirement because of illness or other reasons.

Amend Chapter I, Section 7 to read as follows:

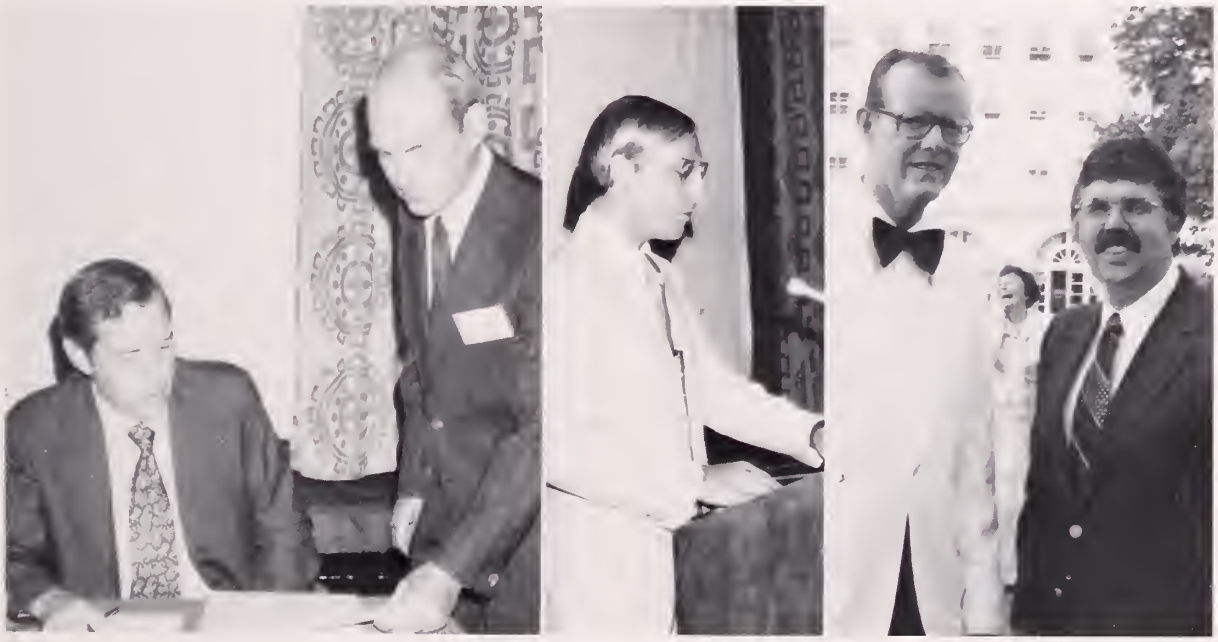
Sec. 7. Dues in the amount of $150 shall be payable annually on January first, of which amount $12 shall be earmarked for the Charles Lively Memorial Scholarship Fund of the West Virginia Medical Association; *except, however, that dues of members in residency programs shall be $50 annually; and dues may be waived—upon nomination by a component society and approved by Council—for active members temporarily incapacitated for a minimum period of one year because of mental or physical illness.* Any member whose dues have not been paid by April first shall be held to be delinquent and shall be automatically dropped from membership. Such member cannot be reinstated except by a majority vote of the component society of which he was a member taken prior to the end of the calendar year.

(This amendment provides for active membership in the Association for all residents upon payment of $50 annual dues; and also make provision for waiving dues of active members temporarily incapacited by illness.)

Program Committee For 1978 Quickly Gets To Work

The Program Committee for the State Medical Association's 1978 Annual Meeting, set for August 23-26 at the Greenbrier in White Sulphur Springs, began its work in businesslike fashion before the final scientific session of the 1977 convention was held.

The Committee Chairman is Dr. David B. Gray of Charleston. Members working with Doctor Gray are Drs. Aarom Boonsue of Point Pleasant, Robert D. Hess of Bridgeport, James T. Hughes of Ripley, Barbara Jones of the West Virginia University School of Medicine faculty in Morgantown and Maurice A. Mufson of the Marshall University School of Medicine faculty in Huntington.



Drs. Joel P. Schrank (left) of Birmingham, Alabama, and Harold M. Voth of Topeka, Kansas (left photo), were speakers during the second general scientific session of the 110th Annual Meeting of the State Medical Association. The third speaker for this session (center photo) was Dr. David Hager of Atlanta. In the right photo, Dr. Clark E. Julius (right) of Knoxville, Tennessee, is shown with Dr. William D. McLean, Beckley dermatologist. Doctor Julius, also a dermatologist, was a speaker for the third general scientific session.

Standing and Special Committees Appointed By Doctor Smith

Here is a partial list of the standing, special and ad hoc committees which have been named by Dr. Joseph A. Smith of Dunbar, President of the West Virginia State Medical Association, to function during his one-year term of office. The remaining committees will be published in the November issue of *The Journal*.

Aging

Lee B. Todd, Quinwood, Chairman; Myer Bogarad, Weirton; Richard Hamilton, St. Marys; Sam Milchin, Bluefield, Virginia; and Ralph H. Nestmann and Pat A. Tuckwiller, Charleston.

Cancer

David B. Gray, Charleston, Chairman; Alvin L. Watne, Morgantown, Vice Chairman; John J. Battaglino, Jr., Wheeling; Walter B. Bice, Jr., and F. Lloyd Blair, Parkersburg; William B. Blake, Jr., and James P. Carey, Huntington; L. Walter Fix, Martinsburg; S. William Goff, Parkersburg; Arthur E. Levy, Williamson; Catalino B. Mendoza, Jr., Clarksburg; Hu C. Myers, Philippi; Robert W. Neilson, Bluefield; Morris H. O'Dell, Charleston; Jess S. Renedo, Wheeling; and John W. Trenton, Kingwood.

Insurance

Lyle D. Vincent, Parkersburg, Chairman; John T. Chambers, Charleston; David V. Cole, Point Pleasant; R. U. Drinkard, Wheeling; L. Walter Fix, Martinsburg; F. Perry Greene, Jr., Parkersburg; H. Summers Harrison, Morgantown; James A. Heckman, Huntington; Upshur Higginbotham, Bluefield; C. A. Hoffman, Huntington; Edward Jackson, St. Albans; Kenneth G. MacDonald and A. Thomas McCoy, Charleston; Buford W. McNeer, Hinton; C. Vincent Townsend, Martinsburg; and John F. I. Zeedick, Charleston.

Sub-Committee on Investments and Trust

C. A. Hoffman, Chairman; Upshur Higginbotham (1978); John T. Chambers (1979); A. Thomas McCoy (1980); and Kenneth G. MacDonald (1981).

Ad Hoc Committee on Professional Liability

Jack Leckie, Huntington, Chairman; John T. Chambers, Charleston; L. Walter Fix, Martinsburg; William E. Gilmore, Parkersburg; Kenneth G. MacDonald, Charleston; and Worthy W. McKinney, Beckley.

Interprofessional Relations

William E. Gilmore, Parkersburg, Chairman.

Sub-Committees

Medico-Legal: Charles W. Merritt, Beckley, Chairman; John C. Bryce, Parkersburg; John F. Otto, Jr., Huntington; and Paul H. Revercomb, Charleston.

Medicine and Religion: Joe N. Jarrett, Oak Hill, Chairman; Marshall J. Carper, South Charleston; and William L. Neal, Huntington.

Medicine and Pharmacy: L. Dale Simmons, Clarksburg, Chairman; Donald E. Cunningham, St. Albans; and John L. Fullmer, Morgantown.

Medical-Dental Liaison: John A. B. Holt, Charleston, Chairman; George L. Armbrecht, Wheeling; Alberto G. Capinpin, Charleston; and Gene Lee Hackleman, Huntington.

Nurses Liaison: Richard E. Flood, Weirton, Chairman; Billie M. Atkinson, Parkersburg; Jean P. Cavender and Peter A. Haley, Charleston; Asel P. Hatfield, Harrisville; and L. Dale Simmons, Clarksburg.

Legislative

Frank J. Holroyd, Princeton, Chairman; W. Alva Deardorff, Charleston, Vice-Chairman; W. P. Bittinger, Oak Hill; A. Paul Brooks, North Parkersburg; George R. Callender, Jr., Charleston; William H. Carter, Williamson; John T. Chambers, Charleston; George A Curry, Morgantown; Del Roy R. Davis, Kingwood; Vernon E. Duckwall, Elkins; Roy A. Edwards, Jr., and A. C. Esposito, Huntington; L. Walter Fix, Martinsburg; Richard E. Flood, Weirton; George Gevas and William E. Gilmore, Parkersburg; Paul E. Gordon, Clarksburg; Louis W. Groves, Jr., Richwood; N. B. Groves, Martinsburg; Carl B. Hall, John M. Hartman and John A. B. Holt, Charleston; J. C. Huffman, Buckhannon; M. V. Kalaycioglu, Shinnston; Jack Leckie, Huntington; Milton J. Lilly, Jr., Charleston; Harvey A. Martin, White Sulphur Springs; A. Thomas McCoy, Charleston; Paul L. McCuskey, Parkersburg; Worthy W. McKinney, Beckley; Charles W. Merritt, Beckley; Joseph D. Romino, Fairmont; Carl J. Roncaglione, South Charleston; James T. Smith and Pat A. Tuckwiller, Charleston; A. J. Villani, Welch; Lyle D. Vincent, Parkersburg; David E. Wallace, Madison; Stephen D. Ward, Wheeling; Henry F. Warden, Jr., Bluefield; Harry S. Weeks, Jr., and Robert R. Weiler, Wheeling; J. Hugh Wiley, Morgantown; and Moseley H. Winkler, Charleston.

Maternal and Perinatal Fetal Welfare

Larry D. Curnutte, Charleston, Chairman; Robert D. Crooks, Parkersburg; Frederick H. Dobbs, Charleston; T. Keith Edwards, Bluefield; W. Gene Klingberg, Morgantown; George S.

Kosar, Weirton; A. Robert Marks, Clarksburg; Thomas G. Potterfield, Charleston; Robert P. Pulliam, Beckley; Narinder N. Sehgal, George A. Shawkey and Robert E. Stone, Charleston; and Charles A. White, Morgantown.

Sub-Committee on Perinatal Fetal Welfare

W. Gene Klingberg, Chairman; Robert D. Crooks, A. Robert Marks, Thomas G. Potterfield and George A. Shawkey.

Medical Aspects of Sports

K. Douglas Bowers, Jr., Morgantown, Chairman; Dewey Besenhaver, Petersburg; A. Paul Brooks, North Parkersburg; Colin M. Craythorne, Huntington; Thomas O. Dotson, White Sulphur Springs; James S. Kessel, Ripley; Ray M. Kessel, Logan; Walter E. Klingensmith, Beckley; Tony C. Majestro, Charleston; George Naymick, Weirton; Carl J. Roncaglione, South Charleston; George W. Rose, Clarksburg; James K. Sexton, Charleston; Clifford Sperow, Martinsburg; H. R. W. Vial, South Charleston; and Robert R. Weiler, Wheeling.

Medical Economics

Harry S. Weeks, Jr., Wheeling, Chairman; and Robert L. Ghiz, Charleston, Vice Chairman.

Sub-Committees

Federal Medical Activities: W. Alva Deardorff, Charleston, Chairman; Everett S. Fogle, Martinsburg; Grover C. Hedrick, Jr., Beckley; J. L. Mangus, Charleston; Richard John Pearson, Morgantown; James F. Slaughter, Dunbar; and James T. Spencer, Charleston.

State Workmen's Compensation: Carl J. Roncaglione, South Charleston, Chairman; Marshall J. Carper, South Charleston; Sherman E. Hatfield, Charleston; Ralph J. Holloway, South Charleston; Lawrance S. Miller, Morgantown; Milton E. Nugent, Wheeling; and Roy R. Raub, Princeton.

Blue Cross - Blue Shield Third Party: Richard O. Rogers, Jr., Bluefield, Chairman; Robert W. Bess, Jr., Piedmont; Donald R. Chadwick, Beckley; Albert C. Esposito, Huntington; Ernest G. Guy, Philippi; Milton J. Lilly, Jr., Charleston; John F. Otto, Jr., Huntington; Richard C. Rashid, South Charleston; and Edward C. Voss, Wheeling.

Public Welfare—Joint Conference Committee: John B. Markey, Charleston, Chairman; Charles E. Andrews, Morgantown; Clemente Diaz, Richwood; Harold P. Dinsmore, Ronceverte; Richard E. Flood, Weirton; Lewis N. Fox, MacArthur; William H. Harriman, Jr., Terra Alta; Seigle W. Parks, Charleston; and Hiram Sizemore, Jr., Shepherdstown.

United Mine Workers Welfare and Retirement Fund: Thomas P. Long, Man, Chairman; Arthur A. Carr, Welch; Ray A. Harron, Bridgeport; John M. Hartman, Charleston; John W. Kennard, Wheeling; Elbert Leon Linger, Clarksburg; Ilona Scott, Princeton; and Lee B. Todd, Quinwood.

Vocational Rehabilitation: Robert L. Ghiz, Charleston, Chairman; George R. Callender, Jr., Charleston; Charles M. Davis, Jr., and W. Gene Klingberg, Morgantown; Ralph S. Smith, Jr., Charleston; Robert J. Tchou, Williamson; William H. Wanger, Martinsburg; R. James Yates and Nicholas D. Zambos, Beckley.

Medical Emergencies and Civil Defense

Jack Leckie, Huntington, Chairman; Adla Adi, Charleston; Aldolfo A. Andrada, Beckley; John V. Brannon, Bridgeport; Frederick M. Cooley, Charleston; William D. Crigger, South Charleston; Henry R. Glass, Jr., Charleston; James C. Hazlett, Wheeling; Jules F. Langlet, Charles Town; Jerry A. Maliska, Charleston; and William E. Walker, Huntington.

Medical Scholarships

Martha Jane Coyner, Harrisville, Chairman; R. L. Chamberlain, Buckhannon; Marshall J. Carper, South Charleston; John M. Daniel, Beckley; Thomas J. Holbrook, Huntington; James T. Hughes, Ripley; Kenneth G. MacDonald, Charleston; John Mark Moore, Wheeling; and Clark K. Sleeth, Morgantown.

Mental Health

Roy A. Edwards, Jr., Huntington, Chairman; Mildred Mitchell-Bateman, Huntington; Randall Connolly, Vienna; Ray S. Greco, Weirton; David P. Hill, Wheeling; Florence K. Hoback and Larry C. Smith, Huntington; Ralph S. Smith, Jr., Charleston; Demosthenes Soulis, Bluefield; Stephen D. Ward, Wheeling; and Charles C. Weise, Charleston.

Military Medical Affairs

Bert Bradford, Jr., Charleston, Chairman; Robert D. Hess, Clarksburg; Logan W. Hovis, Vienna; and James K. Sexton, Charleston.

Program

David B. Gray, Charleston, Chairman; Aarom Boonsue, Pt. Pleasant; Robert D. Hess, Clarksburg; James T. Hughes, Ripley; Barbara Jones, Morgantown; and Maurice A. Mufson, Huntington.

Public Service

C. R. Davisson, Weston, Chairman; Leonard M. Eckmann, South Charleston; Albert C. Esposito, Huntington; G. Thomas Evans, Fairmont; Louis W. Groves, Jr., Richwood; N. B. Groves,

Martinsburg: E. Lee Jones, Wheeling; C. A. Logue, Morgantown; L. J. Pace, Princeton; Jack J. Stark, Belpre, Ohio; Stephen D. Ward, Wheeling; and A. J. Weaver, Clarksburg.

Resolutions

Richard E. Flood, Weirton, Chairman; George R. Callender, Jr., Charleston; William E. Gilmore, Parkersburg; Winfield C. John, Huntington; John J. Mahood, Bluefield; Worthy W. McKinney, Beckley; Joseph T. Skaggs, Charleston; and Harry S. Weeks, Jr., Wheeling.

School Health

Thomas L. Thomas, Wheeling, Chairman; R. J. Bailey, Parkersburg; J. M. Brand, Chester; Hugh M. Brown, Clarksburg; Thomas G. Folsom, Barboursville; Peter A. Haley, Charleston; Grover C. Hedrick, Jr., Beckley; Mary Jordan, Fairmont; Edward Shupala, Parkersburg; and Eli J. Weller, Weirton.

Tuberculosis

Hugh S. Edwards, Beckley, Chairman; J. N. Aceto, Wheeling; Charles E. Andrews, Morgantown; Robert M. Biddle, Parkersburg; J. M. Brand, Chester; William L. Cooke, Dominic J. Gaziano and Ralph H. Nestmann, Charleston; Robert J. Reed III, Wheeling; Donald P. Stacks, Huntington; M. A. Viggiano, New Martinsville; James H. Walker, Charleston; and David H. Williams, Weirton.

Venereal Disease

N. H. Dyer, Charleston, Chairman; Donald E. Farmer, Charleston; Frank M. Peck, Huntington; David S. Pugh, Chester; Page H. Seekford, Charleston; Thomas L. Thomas, Wheeling; Lyle D. Vincent, Parkersburg; K. William Waterson, Wheeling; and Isaiah A. Wiles, Morgantown.

Affiliated Societies, Sections Elect New Officers

New officers elected by some of the sections and societies affiliated with the State Medical Association during the recent Annual Meeting at the Greenbrier include:

Section on Surgery—Dr. Robert J. Reed III of Wheeling, Chairman.

Section on Orthopedic Surgery—Dr. Robert N. Clark, Morgantown, President; Dr. Charles M. Davis, Jr., Morgantown, Vice President, and Dr. Arthur A. Abplanalp, Charleston, re-elected Secretary-Treasurer.

Section on Urology—Dr. James W. Lane, Charleston, President, and Dr. Stanley J. Kandzari, Morgantown, Secretary-Treasurer.

Section on Dermatology—Dr. Nazem Abraham, Huntington, President; Dr. John J. Mahood, Bluefield, Vice President, and Dr. Harold L. Saferstein, Wheeling, Secretary.

Section on Internal Medicine—Dr. Harold Selinger, Charleston, Chairman.

West Virginia Chapter, American College of Emergency Physicians—Dr. William E. Walker, Huntington, President; Dr. Jack R. Page, Beckley, President Elect; Dr. Jerry A. Maliska, Charleston, Vice President, and Dr. Walter H. Moran, Jr., Morgantown, Secretary-Treasurer.

West Virginia Chapter, American Society of Internal Medicine—Dr. Richard G. Starr, Beckley, President, and Dr. John M. Daniel, Beckley, Secretary-Treasurer.

West Virginia Radiological Society—Dr. Orlando F. Gabriele, Morgantown, President; Dr. Charles H. McKown, Jr., Huntington, Vice President, and Dr. James T. Smith, Charleston, Secretary-Treasurer.

In the left photo, Mr. Gerald M. Blank (left) of New York City and Dr. John L. Fullmer of Morgantown discuss printed material distributed in conjunction with Mr. Blank's presentation on "Income and Estate Tax Planning" during the third general session of the State Medical Association's Annual Meeting. On the right, Dr. John J. Mahood (left) of Bluefield receives the Past President's Pin from Dr. Jack Leckie of Huntington during the second and final session of the House of Delegates.

Two Additional Speakers Named For Mid-Winter Conference

Dr. E. Noel McIntosh of Morgantown and Dr. W. Warren Point of Charleston will be among the scientific speakers for the Eleventh Mid-

E. Noel McIntosh, M. D.

W. Warren Point, M. D.

Winter Clinical Conference to be held in Charleston next January 27-29 at the Daniel Boone Hotel.

Doctor McIntosh, Visiting Associate Professor, Department of Obstetrics and Gynecology, West Virginia University School of Medicine, will speak during a session on birth control methods and the use of estrogen Friday afternoon, January 27. His topic will be "Present Status of Oral Contraceptives."

Doctor Point, Professor and Director of Medicine, Charleston Division/WVU Medical Center, will speak on "Diagnosis and Management of Hepatitis" during the Saturday afternoon session.

The State Medical Association is a primary sponsor of the annual continuing education event.

The co-chairmen of the Program Committee, Drs. Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston, said the Friday afternoon birth control and estrogen program will be developed as a public program Friday evening. The latter session also is expected to include a topic related to young women who were DES-exposed.

The conference will begin Friday afternoon and conclude at noon on Sunday.

It was announced previously that Drs. John J. Schwab of Louisville, Kentucky, and Arthur C. Chandler, Jr., of Durham, North Carolina, will be conference speakers. Doctor Schwab will speak on the use of psychiatric consultation for the practitioner during the Saturday morning session, while Doctor Chandler will present an update in ophthalmology Sunday morning.

Other general subject areas for the conference will include the use of psychotropic drugs with children, biofeedback, bacteriology and laboratories in community hospitals, infectious diseases, allergic reactions to drugs and drug interactions, and kidney dialysis.

The schedule also will include a Friday evening physicians' session, held concurrently with the public segment, on the Association's legislative program; and a dinner program—with the speaker to be announced—on Saturday evening.

Holds Harvard Posts

Doctor McIntosh's field of concentration is reproductive endocrinology and population. He came to WVU in 1976 from Harvard Medical

In the left photo, Dr. John J. Mahood (left) of Bluefield, Immediate Past President of the State Medical Association, swears in Dr. Joseph A. Smith of Dunbar as the new Association President during the final session of the House of Delegates at the Association's 110th Annual Meeting. On the right, memhers of the Association's Publication Committee look over graphic material relating to The West Virginia Medical Journal. From left, they are Drs. Thomas J. Holbrook of Huntington, Vernon E. Duckwall, Elkins; L. Walter Fix, Martinsburg, and Joe N. Jarrett, Oak Hill, all Associate Editors of The Journal; and Dr. Stephen D. Ward of Wheeling, Editor of The Journal and Chairman of the Publication Committee. Not shown are Drs. John M. Hartman of Charleston and E. J. Van Liere of Morgantown, Associate Editors. The Committee held a luncheon meeting during the convention.

School, where he is Assistant Professor of Obstetrics and Gynecology. He is also Assistant Professor, Department of Population Sciences, at the Harvard School of Public Health, and is Associate Director, Fertility and Endocrine Unit, at Boston Hospital for Women.

A native of David City, Nebraska, Doctor McIntosh was graduated from the University of Michigan, attended the University of Nebraska College of Medicine, and received his M. D. degree in 1964 from Harvard. He also holds Sc.M. and Sc.D. degrees from the Harvard School of Public Health.

Doctor McIntosh interned at Buffalo (New York) General Hospital, was a research fellow in obstetrics and gynecology at Harvard Medical School from 1966 to 1969, and was a resident in obstetrics and gynecology at Boston Hospital for Women from 1967 to 1971. He also served at the hospital as Chief of the Human Reproduction Unit from 1971 to 1973.

He was a consultant for the U. S. Food and Drug Administration's toxicology study of Red Dye No. 2 from 1973 to 1975; and also served as a consultant to the Commissioner of Health, Commonwealth of Massachusetts, from 1974 to 1976. He was a Physician Member of the Massachusetts Public Health Council in 1975-76.

Doctor McIntosh is certified by the American Board of Obstetrics and Gynecology, and also is certified by the Board in Reproductive Endocrinology.

He is the author of some 25 scientific articles and abstracts.

Also Harvard Graduate

Doctor Point, a native of Charleston, was named to his present position last May. He returned to Charleston in his new post from Cambridge, Massachusetts, where he had served as Associate Director of the Department of Medicine of the Massachusetts Institute of Technology.

Doctor Point was in the private practice of internal medicine and gastroenterology at Massachusetts General Hospital in Boston from 1951 to 1967, and then joined in group practice in those two specialties in the Medical Department of MIT.

He was graduated from Charleston High School and West Virginia University, receiving his M. D. degree in 1945 from Harvard Medical School.

Doctor Point was recertified in 1974 as a Diplomate of the American Board of Internal Medicine and is a Fellow of the American College of Physicians.

The medical director is an Assistant Clinical Professor of Medicine at Harvard. He was an Associate Physician of Massachusetts General Hospital. Chairman of the hospital's Pharmacy Committee and a member of the hospital's Subcommittee on Human Studies of the Research Committee. At MIT, he was Chairman of the Committee on the Use of Humans as Experimental Subjects, Chairman of the Pharmacy Committee, and a member of the Executive Committee, Clinical Research Center.

Doctor Point also was a consultant in gastroenterology at Boston Children's Hospital Medi-

The family of Dr. Joseph A. Smith of Dunbar, who was installed as President of the West Virginia State Medical Association during its 110th Annual Meeting at the Greenbrier in August, is shown in the left photo. They are, front (from left), Doctor and Mrs. H. H. Fisher of Dunbar, parents of Mrs. Smith; Mrs. Smith (Helen), and Doctor Smith; rear (from left), son James F. Smith and daughter Mary Elizabeth Smith of Dunbar, and son Joseph A. Smith, Jr., of New York City. Shown in the right photo are Doctor and Mrs. Raymond Scalettar of Washington, D. C., during the President's Reception for honor guests. Doctor Scalettar is President of the Medical Society of District of Columbia.

cal Center, and was a Visiting Physician at Mount Auburn Hospital.

His other professional memberships include Phi Beta Kappa, Alpha Omega Alpha, Boylston Medical Society. American Gastroenterological Association and the Northeast Medical Association.

Doctor Point served his medical internship and residency at Boston City Hospital, Harvard Service, and was a clinical and research fellow in gastroenterology from 1949 to 1951 at Massachusetts General Hospital. He served with the U. S. Army Medical Corps from 1946 to 1948.

He is the author or co-author of a number of scientific articles, including some 20 Case Records of the Massachusetts General Hospital published in the New England Journal of Medicine from 1951 through 1970.

Other Committee Members

Serving on the Program Committee with Doctors Nestmann and Skaggs are Drs. William O. McMillan, Jr., of Charleston, and C. Carl Tully of South Charleston.

Additional details, including other conference speakers, will be provided in later issues of *The Journal* as the program is completed.

Golf, Tennis, Skeet Titles Decided At Greenbrier

Dr. L. Dale Simmons of Clarksburg, shooting a 78, won the Medical Golf Tournament during the State Medical Association's Annual Meeting at the Greenbrier in August. Mrs. William E. Gilmore of Parkersburg, with a low gross of 79, repeated as the winner of the Auxiliary links competition.

Drs. Ray S. Greco of Weirton and Maurice A. Mufson of Huntington won the Association's tennis tournament, limited to doubles teams. Drs. Larry Dunworth of Huntington and Raymond Scalettar of Washington, D. C., finished second, with the team of Drs. Harold L. Saferstein of Wheeling and Richard Wanderman of Charleston third.

Mrs. Stephen D. Ward of Wheeling and Mrs. Nicholas D. Zambos of Beckley were the doubles winners in the Auxiliary tennis tournament. Mrs. W. Warren Point of Charleston and Mrs. Joseph A. Maiolo of Beckley finished second.

Dr. Clemente Diaz of Richwood won the Medical Association skeet tournament, with Dr. David Hess of Bridgeport the runner-up. There was competition only in the 12-gauge category.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

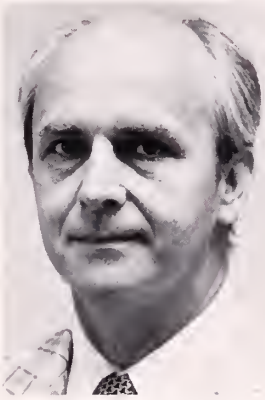
Oct. 1	Red House	Second Allergy Workshop for Primary Care Physicians
Oct. 4	Charleston	Prophylactic Antibiotics Conference
Oct. 5	Wheeling	CIBA Medical Horizons Program on Hypertension
Oct. 7, 8	Morgantown	Cardiology Teaching Days
Oct. 8	Wheeling	A Day on Immunology and Rheumatology
Oct. 12	Charleston	Community Medicine Seminar
Oct. 13	Charleston	Seminar on Health Manpower Education and Distribution
Oct. 13	Morgantown	Pediatric Day—Gastroenterology
Oct. 25	Wheeling	Fort Henry Academy of Medicine
Oct. 28, 29	Morgantown	Neurosciences Teaching Day

Nov. 3	Wheeling	The CME Postgraduate in Family Practice
Dec. 1, 2	Morgantown	Current Concepts in Oral Contraceptive Treatment
Dec. 2, 3	Morgantown	Percutaneous Techniques for Pain

Doctor Burch Appointed To MU-VA Staffs

Dr. Robert E. Burch of Omaha, Nebraska, has received a joint appointment with the Marshall University School of Medicine and the Huntington Veterans Administration Hospital.

A 43-year-old St. Louis, Missouri, native, Doctor Burch will serve the VA Hospital as Chief of Medical Service and hold the rank of Professor of Medicine with the School of Medicine.



Robert E. Burch, M. D.

Doctor Burch, who has been staff physician at the Omaha VA Hospital, was to assume his new duties in September.

A graduate of St. Louis University School of Medicine, he interned at the Jewish Hospital in St. Louis and served his residency in the Department of Medicine of St. Louis University's Firmin Desloge Hospital.

A recipient of a National Institutes of Health fellowship, he took postdoctoral work in biochemistry at Western Reserve University. He has served on the medical staffs of several New York City hospitals, including the Presbyterian Hospital.

He has taught at Western Reserve University, Columbia University College of Physicians and Surgeons, Creighton University School of Medicine and the Medical College of Georgia.

A member of the VA Central Office Regional Research Advisory Group, he served as 1976-77 Chairman. He is a member of several professional organizations, including the American Federation for Clinical Research and the American Physiological Society, and has had more than 60 scientific papers and abstracts published.

He and his wife, the former Christine Efthim, have two children.

Mrs. J. T. Mallamo Installed As Auxiliary President

Mrs. Joseph T. Mallamo of Fairmont assumed the Presidency of the Auxiliary to the West Virginia State Medical Association at the group's

Mrs. Joseph T. Mallamo

53rd Annual Meeting at the Greenbrier in White Sulphur Springs, August 24-27.

Mrs. Mallamo was installed by Mrs. Chester L. Young of Kansas City, Kansas, President of the Auxiliary to the American Medical Association, who was an honor guest.

Also attending as an honor guest was Mrs. Linus W. Hewit of Tampa, Florida, President of the Auxiliary to the Southern Medical Association.

Mrs. Mallamo, whose husband is a surgeon and a member of the State Medical Association's Council, succeeded Mrs. J. L. Mangus of Charleston. The Auxiliary elected Mrs. Robert J. Reed III of Wheeling as President Elect, and the following additional officers:

Mrs. D. Sheffer Clark of Huntington, Vice President and Membership Chairman; Mrs. Gary G. Gilbert of Huntington, Recording Secretary; Mrs. J. D. Romino of Fairmont, Corresponding Secretary; Mrs. Charles S. Harrison of Clarksburg, Treasurer; and Mrs. William T. Lawson of Fairmont, Parliamentarian;

New officers of the Auxiliary to the West Virginia State Medical Association were elected during the group's 53rd Annual Meeting at the Greenbrier in White Sulphur Springs, August 24-27. In the first row (from left) are Mrs. Robert J. Reed III of Wheeling, President Elect; Mrs. Joseph T. Mallamo, Fairmont, President, and Mrs. D. Sheffer Clark, Huntington, Vice President; second row (from left), Mrs. George Naymick, Newell, Northern Regional Director; Mrs. Gary G. Gilbert, Huntington, Recording Secretary; Mrs. J. D. Romino, Fairmont, Corresponding Secretary; Mrs. E. M. Spencer, Bluefield, Southern Regional Director; Mrs. Robert E. Sams, Parkersburg, Central Regional Director, and Mrs. Richard S. Kerr, Morgantown, Eastern Regional Director; third row (from left) Mrs. Charles E. Turner, Huntington, Western Regional Director; Mrs. William T. Lawson, Fairmont, Parliamentarian, and Mrs. Charles S. Harrison, Clarksburg, Treasurer.

Mrs. George Naymick, Newell, Northern Regional Director; Mrs. Richard S. Kerr, Morgantown, Eastern Regional Director; Mrs. Charles E. Turner, Huntington, Western Regional Director; Mrs. E. M. Spencer, Bluefield, Southern Regional Director, and Mrs. Robert E. Sams, Parkersburg, Central Regional Director.

Committee Appointments

Mrs. Mallamo also announced these appointments of committee chairmen:

Mrs. Charles E. Andrews, Morgantown, AMA Education and Research Foundation; Mrs. Richard G. Starr, Beckley, Archives and History; Mrs. M. Bruce Martin, Huntington, Bylaws and Handbook; Mrs. Kenneth D. Bailey and Mrs. Harry C. Fleming, both of Fairmont, Convention Co-Chairmen; Mrs. John J. Schaefer, Charleston, Editor, News Bulletin and Newsletter; Mrs. Alfredo C. Velasquez, Charleston, Circulation Manager, News Bulletin and Newsletter;

Mrs. J. Dennis Kugel, Charleston, Finance; Mrs. Harry F. Coffman, Keyser, Health Careers Scholarship Fund; Mrs. Joe N. Jarrett, Oak Hill, Communications; Mrs. John J. Mahood, Bluefield, Health Committees; Mrs. John A. B. Holt, Charleston, Legislation; Mrs. A. G. Capinpin, Charleston, Necrology;

Mrs. John E. McKenzie, Beckley, Press and Publicity; Mrs. Thomas M. Howes, Morgantown, Caduceans Liaison, and Mrs. Robert J. Reed III, Wheeling, Project Bank and Long-Range Planning Committees.

Mrs. Larry C. Smith and Mrs. Winfield C. John, both of Huntington, are representatives to the Southern Medical Association.

Nurse Anesthetist

Mrs. Mallamo, a native of Farmington, is the mother of four children—a son, a practicing neuro-radiologist in Pamona, California, and three daughters, ages 6, 8 and 10.

The new Auxiliary President is a graduate of the Fairmont General Hospital School of Nursing and its School of Anesthesia. She has served on the board of the West Virginia Association of Nurse Anesthetists and is a member of the American Association of Nurse Anesthetists.

Mrs. Mallamo has served as a volunteer with the Red Cross blood donor program, was a volunteer physical education instructor at Fairmont Catholic Grade School, and was the originator of the physical fitness program there.

She was President of the Auxiliary to the Marion County Medical Society in 1972-73. On the state level, she served on the Health Careers Scholarship Loan Fund Committee for five years and as Chairman for two years, has been Chairman of the Dance Committee at the annual convention, and Chairman of the Auxiliary golf tournament for the past three years.

Education Building Dedication Program Completed

Additional program details have been announced for the dedication of the new West Virginia University Medical Center Education

Loretta Ford, Ed. D., R. N.

Eugene Mayer, M. D.

Building in Charleston during three days of activities October 12-14.

The dedication schedule will include medical meetings on Wednesday and Thursday, October 12 and 13, with the formal dedication ceremony to be held on Friday at 10 A.M. Governor John D. Rockefeller IV will be the guest speaker for the ceremony, with an open house for the public to follow.

The Medical Education Building, completed and occupied last summer, is located at 3110 MacCorkle Avenue, S. E., adjacent to the Charleston Area Medical Center Memorial Division.

Mayor John G. Hutchinson of Charleston will kick off the first meeting on Wednesday at 1 P.M., a "Community Medicine Symposium," with a welcome to participants.

Mr. Larry H. Loftin, Administrator, Hygeia Facilities Foundation, Inc., Whitesville, will be moderator, while Thomas W. Mou, M. D., Dean, Charleston Division/WVU Medical Center, and Professor of Medicine and Preventive Medicine, will introduce the program.

The speakers and their topics will be "Community Medicine in West Virginia: Problems and Priorities"—R. John Pearson, M. D., Professor and Chairman, Department of Community Medicine, WVU; "Primary Care Clinic Development in West Virginia"—Charles D. Holland, M.S.H.A., Unit Coordinator, Office of Health Services Research, WVU;

"Assessment of Need for More Primary Care Practitioners in West Virginia"—Edward M. Bosanac, M. S. Hyg., M. P. H., Research Associate, Office of Health Services Research, WVU; and "Primary Care Strategies: State and National Perspectives"—William Kissick, M. D., George S. Pepper Professor of Public Health and Preventive Medicine, School of Medicine, and Professor of Health Care Systems, The Wharton School, University of Pennsylvania.

Thursday

"Health Manpower Education and Distribution: The Carnegie Commission Report" will be the title for the Thursday morning program beginning at 8:30 with a welcome from Charles E. Andrews, M. D., Provost for Health Sciences and Professor of Medicine, WVU.

The speakers will be Loretta Ford, Ed. D., R. N., Dean, School of Nursing, University of Rochester, on "The Expanded Role of the Non-Traditional Health Practitioner;" Alvin L. Morris, D. D. S., Ph. D., Executive Director, Association for Academic Health Centers, Arlington, Virginia, "The Role of the State University in Health Sciences Education;"

Joseph S. Begando, Ph. D., Chancellor, University of Illinois Medical Center, Chicago, "The Emerging Role of the Clinical Campus," and J. Lowell Orbison, M. D., Dean and Director, University of Rochester School of Medicine, "The Continuing Role of the Traditional Medical School."

The moderator for the morning program will be Herbert H. Pomerance, M. D., Professor and

J. Lowell Orbison, M. D.

A. L. Morris, D. D. S., Ph. D.

Director, Department of Pediatrics, Charleston Division/WVU, and Director of Pediatrics, CAMC.

The title for the Thursday afternoon program will be "Origin and Implications of the Carnegie Commission Report, 'Higher Education and the Nation's Health'." Dr. John T. Chambers of Charleston will be the moderator.

The speakers and their titles will be "Historical Perspective of the Carnegie Commission Report"—John T. Dunlop, Ph. D., University Pro-

fessor of Economics, Harvard University; "National Impact of the Carnegie Commission Report"—Robert J. Glaser, M. D., President, Henry J. Kaiser Family Foundation, Palo Alto, California;

"Future Directions in Health Sciences Education"—E. K. Fretwell, Ph. D., President, State University of New York College at Buffalo, and Member, Carnegie Council on Policy Studies in Higher Education, 1976; and, in a panel presentation on the "Local Impact of the Carnegie Commission Report:" Don L. Arnwine, M.S.H.A., President, CAMC, "West Virginia;" and Eugene Mayer, M. D., Deputy Project Director, North Carolina Area Health Education Center, "North Carolina."

Friday

Doctor Andrews will preside at the formal dedication ceremony, with greetings from Andrew L. Clark, President, West Virginia Board of Regents, and Vincent V. Chaney, Chairman, Board of Trustees, CAMC.

Gene A. Budig, Ph. D., President of WVU, will present opening remarks.

Doctor Andrews will participate, with Doctor Mou, in the presentation and unveiling of a portrait.

Ben L. Morton, Chancellor of the Board of Regents, will introduce Governor Rockefeller.

Other events during the dedication schedule will be a musical program by the American Arts Trio on Wednesday evening, a President's Reception (by invitation) for the WVU President, Doctor Budig, on Thursday evening, and an entertainment program also on Thursday evening.

For background information on the history and development of the Education Building, see the September issue of *The Journal.*

Radiology Board Appointees

Three radiologists have been appointed to the newly-created Board of Examiners of Radiologic Technologists by Governor John D. Rockefeller IV.

The appointees are Drs. Dominic A. Antico of Morgantown, Joseph N. Aceto, Wheeling, and Charles H. McKown, Jr., Huntington.

The board, in accordance with the 1977 law creating it, is composed of a State Health Department representative, three physicians who are radiologists, and three radiologic technologists.

Immunology-Rheumatology Program In Wheeling

A medical conference, "A Day on Immunology and Rheumatology," will be held on Saturday, October 8, at the Ohio Valley Medical Center in Wheeling.

To be held in the amphitheater of the education/administration building at 2000 Eoff Street, the conference is sponsored by the Wheeling Division/West Virginia University Medical Center.

Registration will begin at 8 A.M., with welcoming remarks at 8:45 A.M. by Dr. Martin D. Reiter, Clinical Associate Professor and Vice Chief, Department of Medicine, Wheeling Division/WVU Medical Center.

Topics for the morning session will be "Basic Immunology," by Doctor Reiter; "Immunologic Aspects of Infectious Disease and Malignancy," Robert L. Waldman, M. D., Chairman, Department of Medicine, WVU School of Medicine, Morgantown; and "Asthma," Hyman Chai, M. D., Medical Director, Children's Asthmatic Research Institution and Hospital, Denver.

The afternoon session will begin with "The Role of Immunologic Mechanisms in the Pathogenesis of Rheumatic Disease," by Gerald P. Rodnan, M. D., Professor of Medicine, Rheumatology and Immunology, University of Pittsburgh School of Medicine.

The topics of "Update on Rheumatology," "What's New in Rheumatology," "HLA Antigens and the Rheumatoid Variants," and "Non-Steroidal Anti-Inflammatory Drugs," will be discussed by Anthony DiBartolomeo, M. D., Assistant Professor and Chairman of the Division of Rheumatology, WVU; and Michael Crouch, M. D., Assistant Professor, Division of Rheumatology, WVU.

The final presentation will be "Approach to the Rheumatic Patient," by R. Wade Ortel, M. D., Professor of Medicine, Division of Rheumatology, Wheeling Division/WVU.

The program meets the criteria for eight hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association—and is approved for eight prescribed hours by the American Academy of Family Physicians.

The fee, including lunch, will be $15 for physicians and graduate nurses, with no fee for residents and interns, medical students and student nurses.

For additional information, telephone (304) 234-8363.

New Death Certificate Due January 1, 1978

Editor's Note: Following is a statement, by Mr. Joseph D. Carney, Director, Division of Vital Statistics, West Virginia Department of Health, concerning new vital record forms which will go into use in West Virginia on January 1, 1978:

Following the recommendations of a Technical Consultant Panel of the National Center for Health Statistics, a new form of the death certificate will go into use across the nation on January 1, 1978. In West Virginia, a multicopy form will be used. The multicopy form will contain as its third copy the "burial transit permit."

The "burial transit permit" is the document needed by the funeral director as authority to bury the deceased. Under the system effective January 1, 1978, this permit will be activated by the physician's signature on the certification of death statement.

It is *essential*, therefore, that the certification of death statement be signed *within 24 hours of death*. If the cause of death cannot be clearly stated within the 24-hour time limit, the Division of Vital Statistics advises that the certificate should still be signed and filed with cause of death noted as "pending." Filing the certificate marked "pending" is preferable to holding it beyond the 24-hour legal time limit. If the cause of death cannot be determined until a later time, the certificate should be filed as "pending," and the specific cause of death forwarded to the Division of Vital Statistics when it is later determined.

A new birth certificate form will also go into use January 1. Sample copies of these forms are scheduled to be mailed to physicians in early November.

Council Hears State Officials At Greenbrier Meeting

Reports from state officials and others regarding program elements affecting physicians and health care again highlighted the pre-convention meeting of the Medical Association's Council on August 24 at the Greenbrier in White Sulphur Springs.

Speaking to the Council, and answering questions, were Workmen's Compensation Commissioner Daniel Blizzard II, Insurance Commissioner Richard Shaw, Welfare Commissioner Leon Ginsberg and Mr. Hugh F. Hughes of Columbus, Ohio, Manager of Medicare Field Operations in West Virginia and Ohio for Nationwide Mutual Insurance.

The Council also heard from Dr. Charles E. Andrews, then the state's acting Director of Health, regarding steps taken to implement the 1977 health reorganization statute, and further development of several programs in the Department of Health.

In other action, the Council:

—Elected to honorary membership Drs. W. J. Porter of Wayne; Lacey Wornal of Lewisburg; Randolph L. Anderson and Charles H. Engelfried of Charleston, Robert R. Frye of Mannington, French R. Miller, John H. Trotter, Edward J. Van Liere and Fred R. Whittlesey of Morgantown; Eugene C. Hartman and Lawrence R. Leeson of Parkersburg, and A. R. Sidell of Williamstown. Dr. J. M. Brand of Chester was elected to retired membership.

—Officially set the Medical Association's 111th Annual Meeting for the Greenbrier August 23-26, 1978.

—Gave formal approval to a State Department of Health application for a National Health Service Corps physician to work in a federally-funded Improved Pregnancy Outcome Program designed to reduce incidents of infant mortality.

—Expressed appreciation for the services rendered by several retiring Councilors not eligible for re-election or choosing not to run this year for another term, with the group including Drs. Robert R. Weiler of Wheeling, Robert W. Bess, Jr., of Piedmont, Robert J. Nottingham of Morgantown, Louis W. Groves, Jr., of Richwood and J. L. Mangus of Charleston.

—Reviewed proposed Constitution and Bylaws amendments, and resolutions, which were acted upon or introduced into the Association's House of Delegates later in the day.

—Discussed and approved plans outlined by Association President John J. Mahood, M. D., of Bluefield, on behalf of the Executive Committee, to develop new lines of communication with doctors of osteopathy in West Virginia for review of matters of mutual interest.

Thomas J. Holbrook, Jr. WVU Medical Student

In a news article appearing in the September issue of *The Journal*, the name of Thomas J. Jefferson, Jr.—listed as a Cabell County student from Huntington entering the West Virginia University School of Medicine in August—should have been Thomas J. Holbrook, Jr. The error was contained in the news release supplied to *The Journal* by WVU.

Vermont Physician Accepts MU Pharmacology Post

Dr. Donald S. Robinson of the University of Vermont College of Medicine faculty has accepted an appointment with the Marshall University School of Medicine, Dr. Robert W. Coon, MU Dean, announced.

Doctor Robinson will serve as Chairman of the Pharmacology Department and will hold the rank of Professor. He will assume his duties at Marshall in December.

A 49-year-old Massachusetts native, Doctor Robinson has been on the medical college's faculty since 1968. Currently he is Associate Professor of Medicine and Pharmacology and director of the clinical pharmacology unit at the Burlington, Vermont, school.

"We are fortunate to have secured a person with Doctor Robinson's excellent classroom and research credentials for this position," Doctor Coon said. "His acceptance of the appointment further strengthens the medical school's faculty," he added.

Doctor Robinson earned his M.D. degree from the University of Pennsylvania School of Medicine, interned at the United States Public Health Service Hospital in Seattle, Washington, and served residencies at the Ventura (California) County Hospital, the University of Vermont's teaching hospital, and the Medical Center Hospital of Vermont in Burlington. He also held a postdoctoral fellowship at the University of Vermont College of Medicine, where he earned an M.S. degree in pharmacology.

At the Vermont medical college, Doctor Robinson is Associate Attending Physician at the Medical Center Hospital, Chairman of the Committee on Human Experimentation for the Medical Sciences, and has been Chairman of the Pharmacy and Therapeutics Committee since 1971. He also is a member of the Postgraduate Medical Education Committee.

Doctor Robinson has served as a consultant for the U.S. Food and Drug Administration and is a member of the National Institute of Mental Health's Clinical Psychopharmacology Research Review Committee.

A Diplomate of the American Board of Internal Medicine, he is a member of several scientific and professional organizations, including the American College of Clinical Pharmacology. Doctor Robinson has had more than 40 scientific articles published.

He and his wife, the former Mary Lou Call, have five children.

Unemployed Epileptics Get Rehabilitation Services

West Virginia's Division of Vocational Rehabilitation is giving some special attention to the unemployed epileptic, Dr. Leslie F. McCoy, the agency's Assistant Director for Medical Services, has explained.

"The Division has site-visited special epileptic work programs in other states, hired part-time neurological and psychological consultants and set up a special program at its resident facility, the West Virginia Rehabilitation Center near Charleston, to attempt vocationally to salvage difficult cases," Doctor McCoy has noted. He added:

"The Division is accepting for services epileptics whom it would have passed over a few years ago as too severely handicapped to be rehabilitated.

"The younger (work-age) individual whose seizures have not been brought under control; whose emotional reaction to them has seriously dislocated his life adjustment, or whose overprotective family is blocking his self-sufficiency, are some of the types of cases in which the Division believes it can provide some vocational rehabilitation services through this more intensive effort.

"If you have a patient with seizures who faces significant risk of not getting into, or staying in, the ranks of the satisfactorily employed, the Division would like to have you refer that person to your local Division of Vocational Rehabilitation field office for inclusion in this project."

Pediatric Academy Meeting In New York City

Thousands of child health professionals will gather November 5-10 in New York City to hear reports on the latest in pediatric practice and research at the American Academy of Pediatrics' annual meeting, headquartered in the New York Hilton Hotel.

The scientific program will open with special seminars on Saturday and Sunday, November 5 and 6. These intensive reviews of specific areas will cover such topics as allergy, problems of the newborn, genetics, behavior problems, child development, sports medicine and neonatology.

General sessions, open to all meeting registrants, begin Monday morning with a discussion of immunization and bacterial vaccines on the horizon. Other general sessions, scheduled for Tuesday afternoon, Wednesday and Thursday

morning, will include a panel discussion on food additives and hyperkinesis with Benjamin Feingold, M.D., problems of the high-risk neonate, prevention of obesity in infancy, and the effects of oral contraceptives on adolescents.

In addition, special AAP sections will hold sessions open to all meeting attendees, focusing on such areas as cardiology, surgery, community pediatrics, and diseases of the chest. Several sections will also hold meetings open daily to section members.

On Monday, Tuesday and Wednesday, round-table discussion groups are scheduled. These sessions of limited enrollment will discuss such subjects as breast feeding, communicative disorders, problems in nutrition, adolescent medicine, growth disorders, human sexuality, emotional health, and child abuse and neglect.

Other special events scheduled for the annual meeting include round-table discussions sponsored by the AAP's Council on Pediatric Practice, informal breakfast and luncheon discussion groups dealing with scientific subjects, film presentations, and scientific and technical exhibits.

Two other groups concerned with child health care will meet in New York at the same time as the Academy. The Society for Adolescent Medicine will hold its annual meeting on Saturday and Sunday, and the National Association of Pediatric Nurse Associates and Practitioners will meet all day Sunday.

Philips Roxane Another Contributor To Annual Meeting

Philips Roxane Laboratories of Columbus, Ohio, was a late contributor to support for the State Medical Association's scientific program at the Greenbrier in August.

The Philips Roxane grant was received after the official program for the convention had gone to press, but it was called to the particular attention of the Association officers, the Council and the House of Delegates during the meeting.

CME Accreditation Survey In South Charleston

An accreditation survey of the continuing medical education program of Herbert J. Thomas Memorial Hospital in South Charleston was conducted on September 14 by the State Medical Association, through its Committee on Medical and Hospitals.

The members of the site survey team were Drs. L. Dale Simmons of Clarksburg, Chairman, and Charles E. Turner of Huntington.

Medical Meetings

Oct. 2-6—Am. Academy of Ophthalmol. & Otolaryngol., Dallas.

Oct. 10-13—AAFP, Las Vegas.

Oct. 12-14—Dedication of WVU-CAMC Medical Education Building, Charleston.

Oct. 13-16—Medical Society of Virginia, Richmond.

Oct. 15-19—Am. Society of Anesthesiologists, New Orleans.

Oct. 17-21—ACS, Dallas.

Oct. 23-26—Indiana State Medical Assn., Indianapolis.

Oct. 23-29—Am. College of Gastroenterology, New Orleans.

Oct. 26-28—Pennsylvania Medical Society, Lancaster.

Oct. 30-Nov. 3—Am. College of Chest Physicians, Las Vegas.

Oct. 30—Nov. 4—Am. Society of Plastic & Reconstructive Surgeons, San Francisco.

Nov. 5-10—Am. Academy of Pediatrics, New York City.

Nov. 6-9—Southern Medical Assn., Dallas.

Nov. 8-10—Am. College of Emergency Physicians, San Francisco.

Nov. 18-19—AMA Regional Meeting, Hershey, Pa.

Dec. 3-8—Am. Academy of Dermatology, Dallas.

Dec. 4-7—AMA House of Delegates Interim Meeting, Chicago.

Dec. 5-7—Southern Surgical Assn., Hot Springs, Va.

1978

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

Feb. 8-12—American College of Psychiatrists, New Orleans.

Feb. 23-28—Am. Academy of Orthopaedic Surgeons, Dallas.

March 13-16—ACS, New Orleans.

April 5-6—W. Va. Chapter, Am. Academy of Pediatrics, Wheeling.

April 7-9—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

Aug. 23-26—111th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

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Pseudoventricular Aneurysms

REVERDY H. JONES, JR., M. D.
Chief of Medical Service, Veterans Administration Hospital, Clarksburg, West Virginia.

True ventricular aneurysms are a not uncommon complication of myocardial infarction. Pseudoventricular aneurysms are far rarer and occur most often following cardiac trauma or operative procedures, or more rarely, following myocardial infarction. Two cases of pseudoventricular aneurysm are reported. One case occurred following mitral commissurotomy and a second following myocardial infarction. The second case was found to have pulmonary cryptococcosis which was successfully treated with 5-fluorocytosine. The incidence, etiology, diagnosis and treatment of ventricular aneurysms are discussed as well as the differential criteria between true and pseudoventricular aneurysms.

The word aneurysm, derived from the Greek denoting a dilatation, was used by such early writers as Baillow, Lancisius, Morgani and de Senac to describe a generalized enlargement of the heart. Olaus Borrich of Copenhagen, in 1676, first described an aneurysmal dilatation of a part of a cardiac chamber (the right auricle) and, hence, the first actual description of a cardiac aneurysm in the mondern concept.[1]

In 1757, both Gusmarus Galeati and the great English surgeon, John Hunter, first described an aneurysm of the left ventricle.[2] Hunter's report was a classic example of a left ventricular chronic aneurysm. He stated, "At the apex it was forming itself into a kind of aneurysm becoming there very thin. That part was lined with a thrombus just the shape of the pouch in which it lay." Mathew Baillie, Hunter's brother-in-law, clearly defined a cardiac aneurysm in 1793, and recognized the common association with mural thrombi.[3] Sternberg,[4] in 1914, introduced the modern concept of the relationship of left ventricular aneurysms to coronary artery disease and myocardial infarction and, with this concept, he was the first, in 1912, to diagnose correctly a cardiac aneurysm during life.[4,5] Sternberg foresaw the possibility of radiological diagnosis of cardiac aneurysm and, in 1922, Sezary and Alibert[6] (France) were the first to report a case of ventricular aneurysm diagnosed by x-ray. Refined radiological techniques with cardiac catheterization and ventriculography have enhanced the diagnosis of cardiac aneurysm. With the introduction of surgical repair by Sauerbruch[7] in 1931, and later by Bailey[8] in 1955, many more cases of ventricular aneurysm with excellent reviews have appeared in the literature.[9,10,11,12]

By definition a ventricular aneurysm "is a protrusion of a localized portion of the external aspect of the ventricle accompanied by a corresponding protrusion of the ventricular cavity."[13] This is a "true"aneurysm, its wall consisting of endocardium and myocardium, overlaid with pericardium and often with its cavity filled with thrombi.

In contrast, a pseudoaneurysm is a protrusion of the cardiac wall forming a dilatation or sac whose wall consists only of pericardium and fibrous tissue and whose interior communicates with the ventricular lumen, usually by a narrow neck (Figure 1).

Corvisart, in 1797, described a sacular left ventricular aneurysm "almost as large as the heart itself" which may have been of the pseudo variety.[14] In 1827, Breschet[15] directed attention to a large left ventricular aneurysm which he believed to be "anevrysme faux consecutif," or false, due to disruption of the continuity of the endocardium and myocardium. Legg,[16] in 1884, reported a tremendous left ventricular aneurysm with a neck "scarcely the diameter of a pea." Hunter and Benson,[17] in 1933, recorded a ruptured left ventricular aneurysm, the wall of which consisted of dense fibrous tissue and parietal

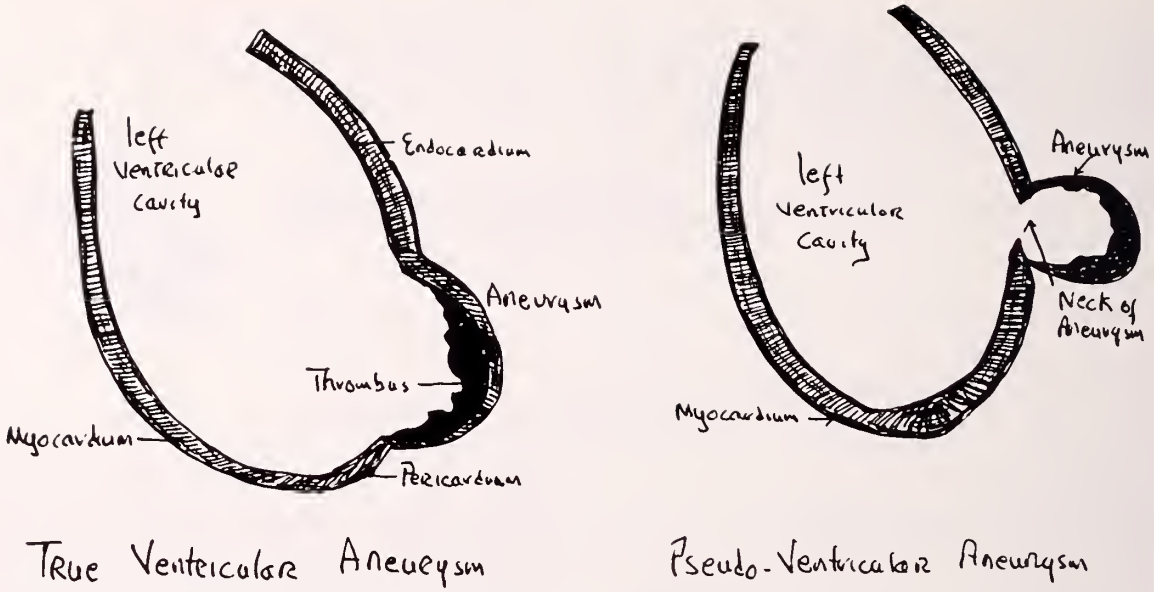


Figure 1. Diagram of true and pseudoventricular aneurysms.

pericardium and which communicated with the left ventricular cavity by a narrow channel measuring only 0.3 cm. in diameter. Since then a number of reports of pseudoaneurysms have appeared in the literature, but far less frequently than those of true left ventricular aneurysms.[18,19,20,21,22]

While myocardial infarction with necrosis and fibrosis of the ventricular wall is responsible for the vast majority of ventricular aneurysms,[23] there are other etiological factors including congenital anomalies, syphilis, mycotic infections, rheumatic necrosis, tuberculosis, instances of piercing chest wounds or blunt trauma and postsurgical lacerations of the heart muscle.

Case One

The patient (H.S. 9097), a 56-year-old white male, was admitted to the Veterans Administration Hospital, Clarksburg, West Virginia, on November 27, 1972, with the complaint of severe shortness of breath of several months' duration and hemoptysis for one day. The patient gave a history of having had acute rheumatic fever, in 1944 at the age of 28, following which he had been asymptomatic with no knowledge of heart disease.

On admission, the patient was a small, well-developed white male who appeared moderately dyspneic and presented the following: weight, 60.78 Kg.; blood pressure 105/72 mm. Hg; pulse 100 and grossly irregular. There was a loud Grade IV/VI presystolic rumble at the left fifth interspace associated with a thrill. Moist rales were heard at both bases. The liver was enlarged three fingerbreadths below the right costal border. The electrocardiogram revealed auricular flutter with a 2:1 block. An echocardiogram was consistent with mitral stenosis. An x-ray of the chest revealed pulmonary congestion, left ventricular enlargement and suspicious left auricular enlargement.

The patient was treated with digitalis, quinidine, and diuretics with relief of symptoms: pul-

Figure 2. Patient One (HS). Immediate postmitral commissurotomy x-ray showing essentially normal cardiac shadow (December 10, 1974).

monary congestion cleared on the x-ray. The arrhythmia persisted but responded to cariover-sion. The patient was advised to have cardiac catheterization for consideration for cardiac surgery, but he refused this and was discharged on December 22, 1972.

From December, 1972, until September, 1974, the patient was followed in the cardiac clinic. He was continued on digoxin and quinidine and remained in normal sinus rhythm. His only complaint was that of mild exertional dyspnea. There was no change in the x-ray of chest which continued to show some cardiomegaly, but no evidence of pulmonary congestion. The patient did develop an episode of ureteral colic on June 22, 1974. Serum calciums at that time were 9.2 and 9.1 mg. per cent; the stones passed spontaneously and he had no further attacks.

On September 12, 1974, the patient was readmitted to the Veterans Administration Hospital with a history of very severe dyspnea of 12 hours' duration. The patient's blood pressure was 100/60 mm. Hg and his pulse was 88 and irregular. Bilateral basal rales were heard, and there was a loud S1 with an opening snap, a right ventricular heave and a diastolic rumble at the apex. There was a Grade I/VI diastolic blow along the left sternal border.

X-ray of the chest revealed left ventricular enlargement, pulmonary congestion, left atrial enlargement. An echocardiogram revealed an E-F slope of 20 mm./sec. consistent with mitral stenosis. Phonocardiogram revealed a diastolic rumble. With diuretics, continuation of digitalis and quinidine, the patient's condition stabilized. He spontaneously reverted to normal sinus rhythm. The patient consented to further cardiac evaluation and was transferred to the Veterans Administration Hospital, Washington, D. C., on September 19, 1974.

On September 25, 1974, the patient underwent right and left cardiac catheterization confirming the diagnosis of moderately severe mitral stenosis and mild aortic regurgitation.

On October 1, 1974, the patient underwent a closed mitral commisurotomy with resection of the tip of the left atrial appendage. After heparinization of 5000 units of heparin, examination of the left atrium was carried out and no thrombi found. The mitral valve was found to be stenotic and measured 1.5 cm. In opening the valve, a small rent was made in the left ventricular lateral wall which was satisfactorily closed with multiple ethiflex and prolene sutures. The patient's postoperative course was satisfactory and he was discharged on October 26, 1974.

From October to December, 1974, the patient was followed in the outpatient department at the Veterans Administration Hospital, Clarksburg, West Virginia. X-ray of chest (December 10, 1974) showed normal cardiac silhouette (Figure 2). He remained asymptomatic, in normal sinus rhythm, and was continued on digoxin and quinidine.

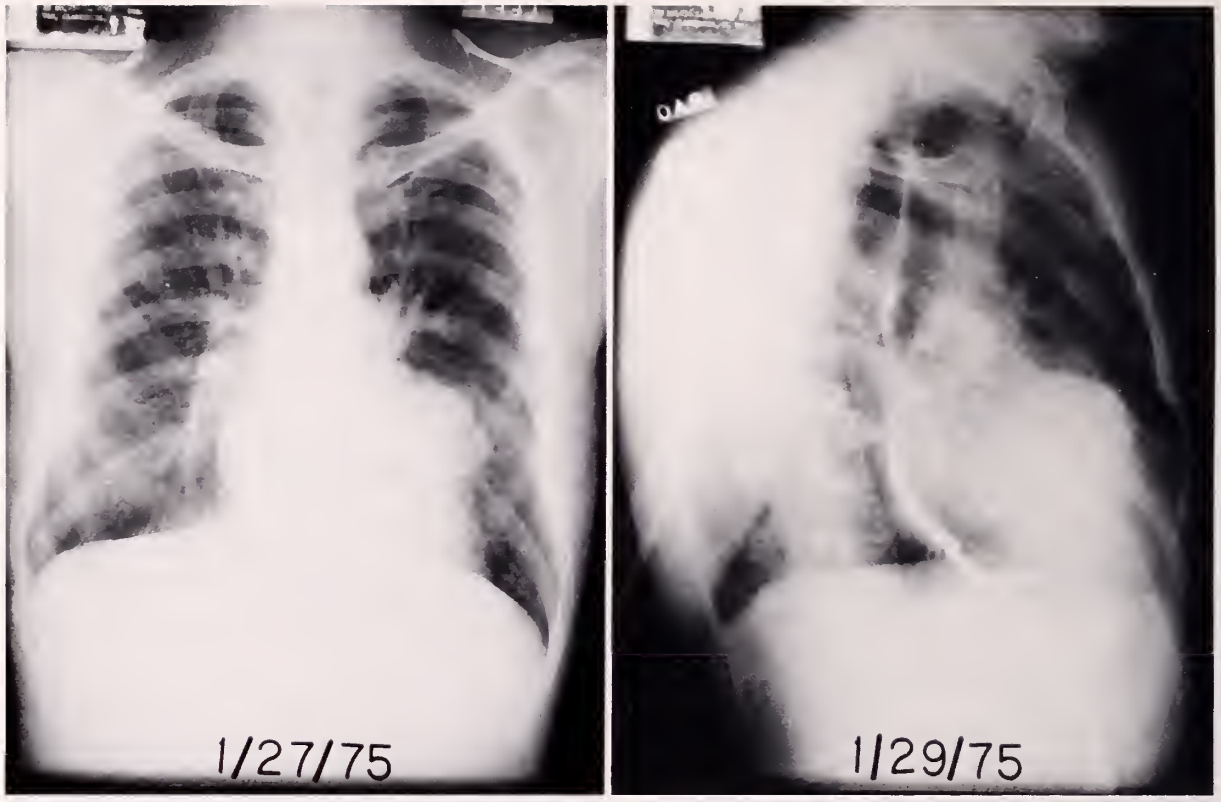
On January 24, 1975, the patient was readmitted to the Clarksburg Veterans Administration Hospital because of a definite change in his mental condition of two weeks' duration. His family reported that the patient was forgetful, withdrawn, had delusions of being two persons and constantly roamed around the house "looking for something." On the day of admission, the patient had told his wife that he thought that "he had cut her head off and put it in the garbage can." It was then the family became alarmed and felt they should seek medical attention. There had been no increasing dyspnea, chest pain or cough.

On admission, blood pressure was 116/70 mm. Hg; pulse was 80 and regular; there was a distinct Grade III/VI presystolic rumble at the apex and a short diastolic blow along the left sternal border. Neurological examination was normal aside from his sensorium.

Complete blood count, urinalysis and serum electrolytes were normal. Electrocardiogram revealed normal sinus rhythm with right bundle branch block. Phonocardiogram and echocardiogram were consistent with moderate mitral stenosis. An x-ray of the skull and brain scan were normal.

An x-ray of the chest on January 27, 1975 (Figures 3, 4) revealed a large, three-by-four-cm. bulge along the left upper ventricular wall, and fluoroscopy demonstrated paradoxical pulsation of this shadow. Psychiatric and psychological consultations felt that the patient's mental aberration was of organic nature and suggested the possibility of an embolic phenomenon. It was felt that the patient's left ventricular protuberance was a ventricular aneurysm (Figure 5), and he was transferred to the Veterans Administration Hospital, Washington, D. C., on Janary 31, 1975.

On February 4, 1975, the patient underwent cardiac catheterization revealing mitral stenosis of a relatively mild degree and a left ventricular pseudoaneurysm. On February 13, 1975, the patient underwent operation with cardiopulmonary bypass. Dissection demonstrated a false aneurysm over the left ventricular area measuring five cm. in its greatest diameter with an



Figures 3 and 4. Patient One (HS). X-ray of chest, AP and lateral, showing large pseudoaneurysm (January 27 and 29, 1975).

opening of one cm. into the left lateral ventricular wall. No thrombus was demonstrated in the aneurysm. At operation, the opening was closed with sutures and teflon pledgets and the aneurysm resected and oversewn. An open mitral commissurotomy was performed with dilation to five cm. of the mitral valve. Postoperatively, the patient did very well and was discharged on March 6, 1975.

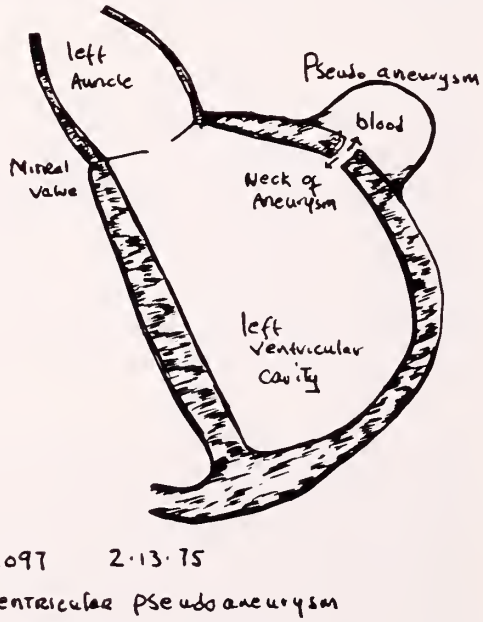


Figure 5. Patient One (HS). Diagrammatic representation of left ventricular pseudoaneurysm with small neck connecting left ventricle with the aneurysmal sac.

Since March, 1975, the patient has been followed in the cardiac clinic. He remains asymptomatic. There has been a slow but definitive improvement in the patient's mental condition. His memory has improved, he is not as lethargic, and is not prone to demonstrate bizarre behavior at home. The patient has had no further dyspnea. An x-ray (Figure 6) of the chest (April 4, 1975) shows no aneurysm.

This is an instance of postoperative or traumatic pseudoaneurysm. Characteristically, the wall of the aneurysmal sac was composed only of pericardium and fibrous tissue with no endocardium or myocardium. Cardiac aneurysms arising from blunt trauma will usually be of the true variety; however, those resulting from penetrating wounds will most likely be pseudoaneurysms, while postoperative cardiac aneurysms are almost always pseudoaneurysms.[24,25] Undoubtedly, the aneurysm arose from the tear in the left ventricular wall sustained during the closed mitral commissurotomy. Smithy,[26] in 1950, first reported a postoperative left ventricular aneurysm in a patient following cardiotomy; also, in 1955, Fojo[27] reported an aneurysm of the left atrium following mitral commissurotomy.

Bailey,[28] in 1957, was the first to repair such a pseudoaneurysm, both of his patients having had previous cardiac surgery for mitral stenosis with a complicating ventricular pseudoaneurysm similar to the present case. With increasing cardiac surgery there have been additional reports of postoperative pseudoaneurysms, although the condition still remains quite rare.

Case Two

This patient (H.G. 9423) was admitted to the Clarksburg Veterans Administration Hospital on April 26, 1972, with the chief complaint of severe substernal pain, cough, and shortness of breath of two hours' duration. The patient's past history revealed that he had had mild hypertension with a transient stroke in 1959 and again in 1960.

On physical examination, the blood pressure was 130/90 mm. Hg; temperature was 37.22° C; pulse, 84 and regular. Examination of the chest revealed coarse rales at both bases. Heart examination revealed no gallop, pericardial friction rub or murmur. The liver was not palpable and the extremities revealed no edema.

Initial laboratory studies revealed a white blood cell count of 17,100 X 10^3 and sedimentation rate of 30 mm./hr which later rose to 105. Blood sugar and serum electrolytes were normal. Urea nitrogen varied from 30 to 40 mg.

Figure 6. Patient One (HS). Post-aneurysmectomy x-ray of chest (April 4, 1975) showing return to normal cardiac configuration.

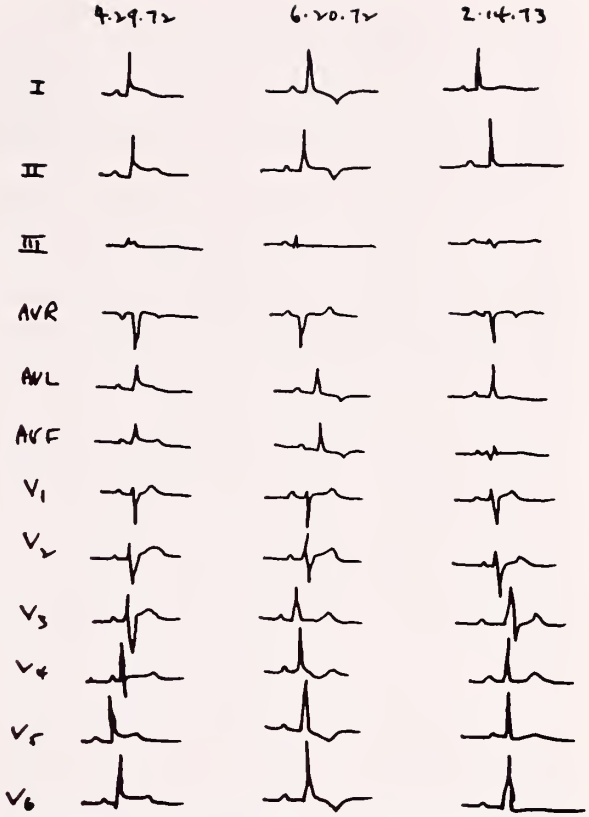


Figure 7. Patient Two (HG). Serial electrocardiograms showing T wave changes consistent with subendocardial myocardial infarction.

per cent. Cholesterol was 240 mg. per cent and triglycerides, 120 mg. per cent. Initial SGOT valuation was 30 IU and LDH, 420 IU. X-ray of chest revealed left ventricular prominence with some engorgement of pulmonary veins and a questionable infiltrate at the left base. An electrocardiogram showed ST segment elevation from V_2 to V_6 and Leads 1 and 2, suggestive of anterior subendocardial injury.

On the next day, the patient's temperature rose to 38.89° C and he developed a loud pericardial friction rub. Serial x-rays revealed increasing cardiac enlargement and pulmonary congestion and the patient was digitalized and given diuretics. Serial enzyme determinations showed SGOT to rise to 126 IU and LDH to 640 IU.

By May 2, 1972, left chest x-ray was reported as essentially normal. The white blood cell count had fallen to 9,300 X 10^3 and the patient was afebrile. Serial electrocardiograms were consistent with a subsiding pericarditis, ventricular ischemia and probable subendocardial infarction. The patient continued to improve clinically and on May 18, 1972, he was discharged on digitalis and diuretics.

The patient was readmitted to the Clarksburg Veterans Administration Hospital on May 31, 1972, because of nausea, vomiting, weakness, and a sensation of light-headedness. Chest pain aggravated by deep breathing in the anterior chest area had persisted.

On examination, the patient's temperature was 37.33° C; pulse, 100; blood pressure, 120/64 mm. Hg; there was a very prominent apical pulsation; no murmurs were heard; pericardial friction rub was still present; the chest was clear; no rales audible; the liver was not palpable and there was no peripheral edema.

Laboratory studies revealed a white blood cell count of 10,500 x 10^3; hemoglobin was 11.2 gm; sedimentation rate at 105 mm./hr. and the urinalysis was normal. An x-ray of the chest revealed some cardiac enlargement with an infiltrate in the left lower lung field. Electrocardiogram continued to show ST segment and T wave changes consistent with ischemia and old subendocardial infarction (Figure 7).

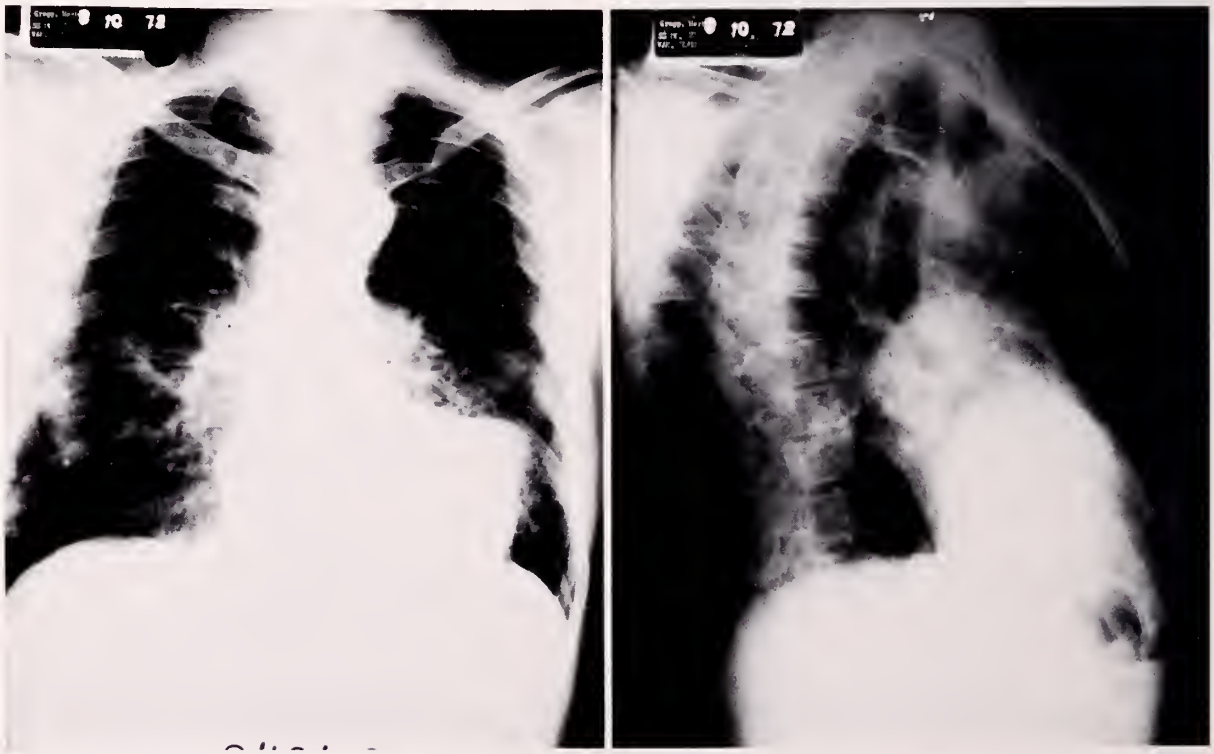
From June 1, 1972, to June 7, 1972, the patient continued to have chest pain and the pericardial friction rub persisted. On June 8, 1972, a pericardial biopsy was obtained. A 7.62-cm. incision was made over the left fifth costal cartilage adjoining the sternum. The pericardium was described as thickened but not constricting the heart, and a small, two-by-two-cm. section of the pericardium was excised. Microscopic section of the pericardium was reported as "pericarditis, fibrinous." The pericardial fluid was cultured with negative results.

Following pericardial biopsy on June 13, 1972, the patient was started on prednisone therapy, 30 mg. daily. Over the next two weeks, the pericardial friction rub decreased, the chest pain subsided and the patient felt much improvement. Prednisone was gradually decreased.

On July 14, 1972, an x-ray of the chest revealed a large projection on the left ventricular border. In retrospect, a suspicious projection was seen on the film taken on June 7, 1972 (before pericardial biopsy). Fluoroscopic examination revealed a paradoxical pulsation of this projection and it was felt that the patient had a ventricular aneurysm.

On July 26, 1972, x-ray of the chest continued to show the ventricular aneurysm, but an ill-defined infiltration was observed in the left lung mid-lung field. The patient's temperature was 37.22°-37-78° C and ampicillin therapy was started. He clinically felt well and was having no chest pain or cough.

On August 10, 1972, ill-defined densities were present in both lung bases (Figures 8 and 9). The patient's febrile condition persisted. Roentgenological diagnosis considered the possibility of pulmonary emboli. There was no change in



Figures 8 and 9. Patient Two (HG). AP and lateral chest x-rays (August 10, 1972) showing large left ventricular aneurysm as well as ill-defined densities in lung base areas.

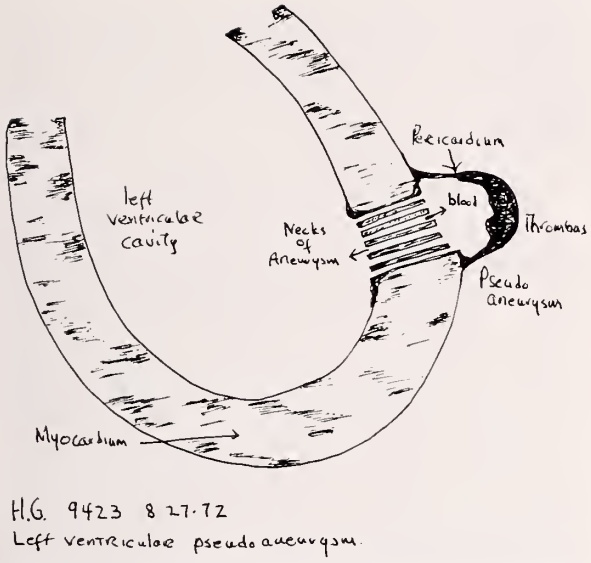


Figure 10. Patient Two (HG). Diagrammatic representation of pseudo left ventricular aneurysm with five small connections or necks.

the left ventricular wall bulge and, on August 11, 1972, the patient was transferred to the Veterans Administration Hospital, Washington, D. C., for further evaluation of a probable left ventricular aneurysm.

On August 17, 1972, cardiac catheterization, both right and left, was performed as well as coronary arteriography with the following findings: (1) marked disease of the left anterior descending and left circumflex arteries and a 50 per cent narrowing of the right coronary artery with marked calcification of the ostium of the right coronary; and (2) paradoxical bulge connected with the left ventricle indicating a narrow-neck aneurysm. A clot filled the lumen and it was felt that this represented a myocardial rupture, probably secondary to circumflex artery thrombosis.

On August 25, 1972, under cardiopulmonary bypass, a large fibrous aneurysm was found. This was opened and five small channels within the wall of the left ventricle were found through which blood was spurting (Figure 10). The wall of the pseudoaneurysm was excised and the multiple ventricular wall defects were sewn over with 2.0 terdex. Exploration of the right lung revealed a palpable mass, a biopsy of which revealed a necrotic granuloma.

The pathological report was received on August 28, 1972, showing a wall of aneurysm with thick fibrous tissue. Multiple necrotizing granulomas were present, while the mucicarmine stain revealed capsule staining cherry red, characteristic of cryptococcus. On September 1, 1972, treatment with 5-fluorocytosine, 1500 mgm. every six hours P. O. was begun.

Postoperatively, the patient had a stormy course. He developed a left empyema necessitating repeated thoracentesis and removal of considerable amounts of old blood. Thoracentesis fluid varied from 200 cc. to 700 cc., and finally it was necessary to place a tube for drainage. The wound subsequently healed.

On September 20, 1972, the patient became extremely dizzy with postural hypotension. He continued with intermittent episodes of dizziness and mental aberration, although no localizing neurological signs were present. The patient underwent several lumbar punctures showing normal pressures. No cells were found; India ink preparations were negative, but there was a persistent elevation of the spinal fluid protein varying from 80-114 mgm. Infectious disease and neurological consultations did not feel that the patient had cryptococcal meningitis, and the most likely diagnosis was that of possible transient ischemic attacks associated with his long-standing psychiatric personality.

On October 27, 1972, the patient was discharged from the Veterans Administration Hospital, Washington, D. C., remaining on 5-fluorocytosine therapy as well as digoxin, 0.25 mg. a day. On December 11, 1972, x-ray showed no

Figure 11. Patient Two (HG). Postoperative (two years) chest x-ray showing normal cardiac silhouette and clear lung fields.

aneurysm with improvement in pulmonary lesions and 5-fluorocytosine treatment was discontinued.

Since this time the patient has had a slow but progressively improved course. In 1974, he remained asymptomatic with a normal x-ray of the chest (Figure 11).

This case represents an instance of the far more common postmyocardial infarction ventricular aneurysm. The instance of ventricular aneurysm following myocardial infarction has been reported varying from three to as high as 38 per cent. Schlicter, Hellerstein and Katz,[23] in a classic review of 512 autopsied cases of myocardial infarction, found 102 cases of ventricular aneurysms, an incidence of 20 per cent. Wang, Bland and White,[29] in an equally impressive series of 528 autopsied cases of myocardial infarction, found a lesser incidence of ventricular aneurysm of only 10 per cent.

The vast majority of postmyocardial infarction left ventricular aneurysms are of the true variety, with a large-mouth, sacular bulge and a wall consisting of all the cardiac layers. Occasionally, however, pseudoaneurysms of the left ventricle will follow myocardial infarction. While pseudoaneurysms had been previously reported, Hunter and Beeson,[17] in 1933, were the first to record an instance of pseudoaneurysm following myocardial infarction.

Following myocardial infarction, the infarcted tissue becomes fibrous, scarred and weakened and in some cases may bulge to form a sac, a true aneurysm.

The pathological development of a pseudoaneurysm following myocardial infarction differs from this usual process. Edwards[20] believes that such aneurysms are an uncommon result of left ventricular rupture. In the usual case of left ventricular rupture following myocardial infarction, a massive hemopericardium results with sudden death. In the instance of rupture with the formation of a pseudoaneurysm, a different sequence of events occurs. The hemorrhage is slower and not so violent and is contained or restricted by an adhesive pericardium forming a well localized sac communicating with the ventricular cavity through the rupture and, thus, a pseudoaneurysm. Edwards further feels that in the case of a false aneurysm that prior to the left ventricular rupture there is a pericardial reaction over the infarcted area resulting in adhesions sufficient to prevent an escape of blood into the pericardial space when rupture subsequently does occur. The incidence of pericarditis in acute infarction with aneurysm is greater than that of acute myocardial infarction alone, and Sternberg,[4] as early as 1914, considered the history of combined myocardial infarction and pericarditis as an important sign that should alert one to the possibility of early aneurysm formation.

Symptoms And Diagnosis

The symptoms of pseudoaneurysm are dependent on its size and complications and are quite similar to those of a true ventricular aneurysm. Large aneurysms lead to intractable congestive heart failure in spite of rigid medical management. Cardiac arrhythmias may be a serious complication of both types of aneurysms. Mural thrombi within the aneurysmal sac are common to both true and false aneurysms. Schlichter[23] reported over 53 per cent of ventricular aneurysms to contain mural thrombi. The thrombi differ, however, in that in true aneurysms there is a degree of organization and adherence to the sac wall. Thrombi in a false sac remain nonadherent because the aneurysm is essentially avascular. Because of this, one might expect a higher incidence of systemic embolization with false aneurysms, but their small ostia apparently render this complication infrequent.

Diagnosis depends on the relative history and the roentgenological findings, but it must be stressed that *routine x-ray films will fail to reveal most ventricular aneurysms.* In a review of over 80 postmyocardial left ventricular aneurysms, Burchell[10] found only one instance that had been diagnosed by routine A-P x-ray film. A left ventricular bulge seen on routine chest films raises the diagnostic possibility of a cardiac tumor or pericardial cyst. Direct ventriculography will provide the definitive diagnosis of an aneurysm and, by visualizing the small neck of the aneurysmal sac, can point to a pseudoaneurysm.[30] Persistent ST segment elevation in the electrocardiogram may aid in the diagnosis of an aneurysm, particularly if it is of the postmyocardial true variety. More recently, Botvinick has utilized the noninvasive technique of radioisotope gated cardiac blood pool imaging in the diagnosis of a pseudoaneurysm which would eliminate the dangers of cardiac catheterization.[31]

Treatment

Many true left ventricular aneurysms can be handled medically with little or no treatment. Rupture of such an aneurysm is rare so that the mere presence of a true aneurysm is not an indication for surgical repair. When intractable congestive heart failure, refractory arrhythmias or thromboembolic phenomena complicate the clinical picture, surgical repair of the ventricular aneurysm in indicated.[9]

On the other hand, pseudoaneurysms are quite prone to rupture so that, unlike a true ventricular aneurysm, once the diagnosis of pseudoaneurysm is made, surgical repair should be considered immediately. The following chart will outline the major differences in true and pseudo left ventricular aneurysms (Table).

TABLE

Differential Characteristics of True and Pseudoventricular Aneurysms

True	*Pseudo or False*
1. More frequent	1. Quite rare.
2. Usually post-myocardial infarction.	2. Usually post-surgical or post-trauma; rarely post MI.
3. Aneurysmal wall consists of all cardiac layers.	3. Aneurysmal wall consists only of pericardium and fibrous tissue or adjacent structures.
4. Mouth or neck has large diameter.	4. Neck of small diameter.
5. Emboli, congestive heart failure, and arrhythmias may occur.	5. Emboli, congestive heart failure and arrhythmias occur less frequently.
6. Rupture rare.	6. Often rupture.

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Primary Adenocarcinoma Of The Vermiform Appendix: Report Of Five New Cases And Review Of The Literature

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Primary adenocarcinoma of the appendix is a rare lesion. Since the first case was described by Berger in 1882,[5] fewer than 200 cases have been reported in the English literature. There is general lack of agreement concerning the treatment of primary adenocarcinoma of the appendix. Although this disease is perhaps more common than its reported incidence indicates, little is known concerning the frequency, route, and the extent of metastasis or its prognosis. The purpose of this study is to present five new cases encountered at Charleston Area Medical Center (CAMC) at both Memorial and General Divisions and a review of the literature regarding incidence, pathology, pathophysiology, diagnosis, the best surgical treatment, and prognosis of this disease. Including incidental appendectomies, 10,611 appendectomies were performed in our institution in the period between 1959-1975. Only five cases of primary adenocarcinoma of the appendix were encountered (Table 1).

TABLE 1

Analysis of the Appendectomies Done at Both Divisions of Charleston Area Medical Center from 1959-1975 (17 years)

	Charleston General Hospital	*Charleston Memorial Hospital*
Appendectomies for acute appendicitis	1,518	1,739
Appendectomies for other diseases and incidental ones	3,547	3,805
Number of primary adenocarcinoma of the appendix	3	2
Total Appendectomies	5,065	5,546
Total Appendectomies at both Divisions	10,611	
Total Cases of primary adenocarcinoma of the appendix	5 Cases	

Case Reports

Case One: H.L., a 73-year-old white male, was admitted to Memorial Division, CAMC, on April 6, 1973, with an acute episode of pain, of five days' duration, in the right flank radiating to the right lower quadrant that was associated with burning on urination, hesitancy, nocturia, urgency and hematuria. No gastrointestinal complaints were reported with the exception of occasional constipation. On examination, temperature, pulse and respirations were normal. The abdomen showed right costovertebral angle tenterness, with no masses being palpable. There were no other abnormal findings. CBC revealed 11,100 WBC's with 90 per cent segmented. Urinalysis showed 12-14 red blood cells.

Primary diagnosis was to rule out right pyelonephritis or ureteral stone. The IVP showed some dilatation of the right renal pelvis and upper ureter. Retrograde ureterogram showed a short stricture at the junction of the middle and lower third of the right ureter. Exploration of the right ureter was done on April 12, 1973. The ureter was found to be involved in a tumor mass that arose in the appendix. The entire peritoneal surface was studded with tumor nodules as was the pelvis. Frozen section of one of these nodes was done which showed metastatic adenocarcinoma. Surgical consult (during surgery) was made and it was decided to resect the terminal ileum, cecum, appendix with right nephrectomy, and the right ureter was excised as palliation for the urinary obstruction. The pathology report showed well-differentiated mucinous adenocarcinoma of the appendix arising in non-obstructing metaplastic mucocele with extension into the right ureter and surrounding structures.

The patient did unusually well postoperatively and was discharged on April 21, 1973, and was put on 5FU IV weekly. The patient was admitted for a second time on March 1, 1974, because of partial bowel obstruction. On examination, there was a huge mass occupying the lower half of the abdomen. The patient was treated conservatively and was sent home to expire on May 2, 1974.

Case Two: J.T., a 62-year-old Caucasion female, was admitted to the hospital on January 21, 1975, with a five-day history of right lower quadrant colicky abdominal pain associated with nausea but no vomiting, and with a history of dyspepsia. Three months earlier, at another hospital, she was submitted to an examination including a barium enema, reported as normal except for

some scattered diverticulae. On examination, the abdomen showed marked tenderness in the right lower quadrant with guarding and rebound tenderness. There was an ill-defined mass in the right lower quadrant. Bowel sounds were hypoactive. The rest of the examination was normal. CBC showed WBC's 19,800 with 83 segmented and 3 stabs. The abdominal x-rays were normal. The preoperative diagnosis was to rule out: (1) acute appendicitis with appendiceal abscess, (2) diverticulitis with abscess, and (3) carcinoma of the cecum. The patient underwent exploratory laparotomy which revealed perforated gangrenous appendix adherent to the surrounding structures; consequently, an appendectomy was performed. Postoperatively, a wound infection appeared which was treated as usual. The pathology report showed primary adenocarcinoma of the appendix. Due to the previous infection, the patient was rescheduled for right hemicolectomy; however, after six weeks, on exploration, a massive intra-abdominal metastasis was found. No other surgical procedures were done and the patient was discharged on chemotherapy (5FU, 600 mg/m2, IV weekly). She was readmitted twice because of metastatic carcinoma of the appendix with severe nausea and vomiting due to the chemotherapy, which was treated conservatively. The patient expired on June 25, 1975.

Case Three: H.E., a 56-year-old white male, was admitted on February 2, 1968, with pain in his right flank. During previous months, the pain occurred intermittently, but recently began to radiate to the right lower quadrant. On examination, the abdomen showed tenderness in the right lower quadrant, no masses, no other abnormal findings. Temperature was 99.0. CBC showed WBC's 12,400 with a shift to the left. Preoperative diagnosis was to rule out acute appendicitis. Exploratory laparotomy was done which showed a markedly inflamed appendix which was adherent to the sigmoid colon, terminal ileum, cecum and right ureter. Appendectomy was done but the pathology report showed primary mucus producing adenocarcinoma of the appendix. The patient had a downhill postoperative course and died of septic shock on February 26, 1968, before considering further surgery. It has to be noted that the patient was put on a course of 5FU postoperatively for one week when it was discontinued because of nausea, vomiting, and diarrhea, but the platelets and CBC were within normal limits.

Case Four: V.D., a 55-year-old white male, was admitted on May 13, 1961, with intermittent pain in the right lower quadrant occurring during the past six weeks, and reaching severity 24 hours prior to admission with nausea, vomiting, and constipation. On examination, there was marked tenderness, rebound and guarding in the right lower quadrant of the abdomen, no palpable masses, no other abnormal findings. Preoperative diagnosis was acute appendicitis. Laparotomy was carried out which showed acute gangrenous ruptured appendix: appendectomy was done. The pathology report revealed primary adenocarcinoma of the appendix. The postoperative course was uneventful and right hemicolectomy was done one week later. Pathology report showed one lymph node involved. The postoperative course again was uneventful and the patient was discharged. The patient was readmitted on February 18, 1962, with metastasis to the anterior abdominal wall and the scar, which was proved by biopsy. The patient expired at home on June 18, 1962.

Case Five: A.C. was a 62-year-old white female admitted on February 23, 1959, with abdominal distention, nausea, and constipation during the past few months. On examination, the abdomen showed moderate distension with a mass almost occupying the lower abdomen, mildly tender, and somewhat fixed. On pelvic examination, the mass could be felt in both fornices. CBC and other tests were unremarkable. Preoperative diagnosis was to rule out carcinoma of the ovary with intra-abdominal metastasis. Exploratory laparotomy was done which showed extensive carcinoma metastasized to all organs of the abdominal cavity. The distorted, somewhat tubular structure which was thought to be the appendix, was adherent to the anterior abdominal wall. Right oophorectomy and appendectomy were done to confirm the diagnosis which proved to be primary mucous producing adenocarcinoma of the appendix with involvement of the left ovary. X-ray treatment was tried postoperatively. She was readmitted twice after that for symptomatic treatment and lastly expired on November 4, 1959 (Table 2).

Anatomical Considerations

At one or two points, both the longitudinal and circular muscle fibers are deficient, so that the submucosa and serosa are continuous; thus, submucosal infiltration may be considered subserosal.[20,33,47,50,51] The lymphatics from any part of the appendix run past the nodes near the organ to the main ileocolic chain, reaching even those of the upper group which lie on the duodenum, so any node of the entire upper or lower ileocolic chain may be primary drainage of the appendix.[27,1,37] The narrow appendiceal lumen may become occluded by tumor and give rise to early

TABLE 2

Summary of the Five New Cases of Primary Adenocarcinoma of the Appendix

Case	*Age*	*Sex*	*Race*	*Presenting Picture and Preoperative Diagnosis*	*Operative Findings and Pathological Diagnosis*	*Operation*	*Follow-Up and Survival*	*Cause of Death*
H.L.	73	Male	White	Pyelonephritis and right ureteral obstruction.	Tumor mass in the appendix and extended to the right ureter with peritoneal implants. Frozen section showed primary adenocarcinoma of the appendix.	Palliative right nephrectomy and appendectomy	13 months	Metastasis
J.T.	62	Female	White	Appendiceal abscess rules out carcinoma cecum (mass right lower quadrant)	Perforated gangrenous appendix with diffuse intra-abdominal metastasis. Pathology report: primary adenocarcinoma of the appendix.	Appendectomy	5 months	Metastasis
H.E.	56	Male	White	Acute appendicitis	Markedly inflamed appendix. Pathology report: primary adenocarcinoma of the appendix.	Appendectomy	Expired 3 weeks Postoperatively	Septic Shock
V.D.	55	Male	White	Acute appendicitis	Acute gangrenous ruptured appendix. Pathology report: primary adenocarcinoma of appendix.	Appendectomy Right hemicolectomy	16 month	Metastasis
A.C.	62	Female	White	Abdominal distention and masses, rule out CA of ovary with metastasis	Extensive CA metastasis to almost every organ in the abdomen. Appendix was adherent to the anterior abdominal wall, swollen and inflamed; also the right ovary has metastasis. Pathology report: adenocarcinoma of the appendix.	Appendectomy Right oophorectomy to confirm diagnosis	9 months	Metastasis

warning acute appendicitis or rupture with dissemination of the tumor.[33,47,23,57,60]

Pathological Considerations

Incidence: Primary adenocarcinoma of the appendix is rare.[18] The first description was made by Berger in 1882, while McCollum[32] suggested that the relative infrequency of invasive appendiceal carcinoma may be explained on the basis of superimposed inflammatory changes leading to extirpation of the carcinoma when it is in a pre-invasive stage. As of 1975, fewer than 200 cases had been reported in the English literature.[25,8,56,15,30,2] Carcinoma has an incidence of two to eight per 10,000 appendices removed for disease, incidentally or at autopsy.[6,39] Collins reported an overall incidence of 0.08 per cent in 71,000 specimens examined.[10] Warren and Warren reported two cases of adenocarcinoma in 6,797 appendectomies.[58] Seven cases were discovered in the Henry Ford Hospital in 14,173 appendectomies.[47] These figures place the incidence of adenocarcinoma of the appendix at about 0.07 per cent.[12] Adenocarcinoma of the appendix accounts for 0.2-0.5 per cent of all tumors of the gastrointestinal tract.[50] Five cases were reported in our institution in 10,611 appendectomies done from 1959-1975 which is close to the overall incidence reported in the English literature.

Age: The peak age parallels that of colonic adenocarcinoma, namely, in the range of the fourth and fifth decades;[36,52] however, the recorded ages vary from 17 to 84 years.[37,16] In our series, the ages lie in range between 55 to 73 years.

Sex: Adenocarcinoma of the appendix is slightly more common in males, which might be significant as more appendectomies have been done in females.[47,6,16,9,55] In our series, three were males and two were females.

Race: More cases have been reported in Caucasians than in other races.[47]

Macroscopic or gross picture: These tumors might show three main types of growth: (1) polypoid or papillary, (2) ulcerative or (3) infiltrative.[47]

Microscopic picture: These tumors resemble adenocarcinoma of the colon. They do not produce a lot of mucus as the malignant mucocele but are more malignant and invasive.[46]

Location: Primary adenocarcinoma of the appendix originates at the tip or base but more frequently at the base.[9]

Modes or Metastases: Adenocarcinoma of the appendix is spread by local invasion, lymphatics, and blood stream. Regional nodes are frequently involved. Liver metastasis is common and direct involvement of adjacent structures is not uncommon. Peritoneal implants are frequent and felt to be related to rupture of the appendix.[12] Sieracki and Tesluk[47] found no blood-vessel invasion in any of their cases.

Pathological classification: Tumors of the appendix could be classified into three groups: (1) carcinoid type, 88 per cent; (2) cystic type (malignant mucocele), eight per cent; and (3) adenocarcinoma, four per cent. Table 3 compares these three types.[9,54,22]

Two other classifications of adenocarcinoma of the appendix were provided by Sieracki and Tesluk,[47] in 1956: (1) invasive, in which the lesion extends beyond the mucosa, or (2) noninvasive, in which the lesion is limited to the mucosa. Clear differentiation between carcinoid and adenocarcinoma was first made by Hughes in 1951.[26]

Pathophysiology: The pathophysiology underlying the symptom complex of this lesion is the result of one of the following: (1) obstruction of the lumen by tumor with or without perforation; (2) infiltration of the wall by tumor with a secondary mural infection; or (3) obstruction of either the lymphatics or blood vessels.

Other pathological considerations: Guarino and Chitwood[21] set two specific criteria to diagnose a lesion to be truly a carcinoma of the appendix: (1) continuity of the carcinoma with appendiceal mucosa, and (2) presence of neoplastic acini containing mucin to exclude simple mucocele of the appendix. Several authors object to the need for demonstrating mucosal continuity.[55,14,53] This seems plausible in cases in which long follow-up has been obtained and in which no other primary tumor is found.[39] Carcinoma of the appendix can cause pseudo-myxoma peritonei and deep vein thrombosis,[59] but this is rare.

Diagnosis: Adenocarcinoma of the appendix has never been diagnosed preoperatively, although in one instance the diagnosis was entertained as a possibility, a fact initially stated by Rolleston and Jones in 1906.[23,18,36,55,53,43,28] The main clinical presentation of carcinoma of the appendix is acute appendicitis. Hesketh reported a series of 94 cases in which 44 per cent presented as acute appendicitis, 14 per cent as appendiceal abscess, 11 per cent as chronic appendicitis, 11 per cent terminally, and 14 per cent at incidental appendectomy.[23] Other presentations include right lower quadrant mass, abdominal fistula, pyelonephritis, and/or right ureteral obstruction.[23,36,28] Sieracki and Tesluk reported that almost two thirds of the cases presenting with an acute abdomen were most often diagnosed as acute appendicitis. Any suspicion, particularly in patients of the above mentioned

TABLE 3

Comparison and Classification of Three Types of Neoplasm of the Appendix

	Carcinoid	*Mucocele*	*Adenocarcinoma*
Location	Usually tip	Tip or base	Tip or base, more frequently base
Incidence	89 per cent	8 per cent	3 per cent
Gross characteristics	Yellowish, solid	Cystic, frequently on basis of a mucocele	Grayish, polypoid or ulcerating
Microscopic structure	Poorly formed, acini, mucosa intact over tumor; reduction of silver salts; affinity for chrome salts	Papillary projections originating as in cyst-adenocarcinoma of ovary; epithelial cells few because of destruction by mucus	Frequently well formed acini; mucous membrane ulcerated; comparable to carcinoma of colon
Mitoses	Few	Few	Variable
Mucus	None	Secretes large quantities	Secretes variable quantities
Metastasis	To regional nodes in less than 1 per cent	So-called pseudomyxoma peritonei	To lymph nodes, liver, peritoneum, and lungs
Survival Rates	100 (27) (5 yr.)	67 (27) (5 yr.)	20-92 (47, 1, 57, 51) (3 yr.)

age range, should be examined by frozen section.[29,47]

The value of the barium enema as a diagnostic aid is evidenced by the visualization of extracecal mass in several recent cases.[39,40,49] Pugeda, Hinshaw, and Phil reported seven cases of primary adenocarcinoma of the appendix, half of which were incidental appendectomies, the other half acute appendicitis.[41] Metastasis at the time of the diagnosis has been reported to be as high as 10 per cent.[37,13]

In our series (Table 2), two patients were diagnosed preoperatively as having acute appendicitis, one case as appendiceal abscess (rule out carcinoma of the cecum), another case as pyelonephritis and right ureteral obstruction, and the last case as intra-abdominal malignancy, probably carcinoma of the ovary with metastasis. As evidenced in the report, four were far advanced at the time of diagnosis, possibly explaining the short survival period.

Treatment and prognosis: In most instances, the initial procedure is appendectomy. Although some authors disagree,[23,11] most[47,52,24,4,17] believe no further treatment is required for carcinoma *in situ* or confined to the mucosa. There is almost general agreement that right hemicolectomy, if not done at the initial procedure, should be done as early as possible. Pack and Grill[28,38] recommended bilateral oophorectomy at the time of the right hemicolectomy because of frequent metastasis to the ovaries. The rationale for right hemicolectomy is twofold. The lymphatic drainage of the appendix occurs directly to the lower ileocolic nodes or upper ileocolic nodes that lie on the duodenum; secondly, the submucosa and serosa are in contact at two points in the appendix, as mentioned, in the anatomy.

For advanced carcinoma of the appendix, x-ray therapy has proved of little value.[47] Accepted by some as standard treatment, 5-FU has provided only infrequent, incomplete, and fleeting anti-tumor effects which are probably more than counterbalanced by its gastrointestinal, mucocutaneous, and hematologic anti-host effects. There is no evidence that 5-FU contributes to patient survival when used at any stage of gastrointestinal carcinoma. Trials of combination chemotherapy treatment have been tried recently.[35]

Follow-ups of patients treated by appendectomy alone and those treated by appendectomy and right hemicolectomy are shown in Table 4. The three-year survival rate for appendectomy with right hemicolectomy is almost three times that for appendectomy alone.

Delgando *et al*[13] also reported that the lesion exhibits early transmural extension as well as early nodal metastasis. A review of previous reports showed a 48 per cent mortality rate due to metastasis when the initial treatment consisted only of appendectomy; however, the mortality rate due to metstasis was only 18 per cent when the initial treatment was a right hemicolectomy. Perforation occurs in about 15 per cent of cases and does not seem to alter the survival rate; also, this should not alter the operation of choice or treatment, i.e., either primary or secondary right hemicolectomy.[37] Consequently, it is not valid to classify adenocarcinoma of the appendix as a low grade malignancy.[41,1,7,19,31,48]

Summary

Five cases of invasive primary adenocarcinoma of the appendix in our institution are presented with a review of the literature. The pathology, pathophysiology, anatomy, diagnosis, treatment and prognosis are discussed. More than half of the patients had presenting symptoms of acute appendicitis and the diagnosis is almost never recognized before surgery. If the appendix appears normal, frozen section should be considered. To obtain the best prognosis it is recommended that right hemicolectomy be performed for invasive adenocarcinoma of the appendix either at the initial operation or subsequently, unless the adenocarcinoma is confined to the

TABLE 4

Treatments and Results in Invasive Lesions in Cases with Adequate Follow-Up Study

	Appendectomy Alone		Appendectomy Plus Right Hemicolectomy	
Authors	*Number of Cases*	*Three-Year Survival (27)*	*Number of Cases*	*Three-Year Survival (%)*
Niceberg, Feldman and Mandelberg[1]	26	73	12	92
Hesketh[57]	19	20	31	63
Steinberg and Cohn[37]	8	37	15	87
Edmondson and Hobbs[51]	37	37	28	79

mucosa, where appendectomy alone might be considered. Adenocarcinoma of the appendix has poor prognosis unless discovered early, which is unusual.

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Special Article

A Colleague's Views On Medicine And Health*

CHARLES E. ANDREWS, M. D.
Provost of Health Sciences and Professor of Medicine, West Virginia University Medical Center, Morgantown; and former Acting Director, West Virginia State Health Department.

DOCTOR Mahood, Doctor Budd, and members of the House of Delegates:

I have had many "firsts" this summer and I have enjoyed most of them. This is another first for me, to be able to address the House of Delegates, and I appreciate the opportunity very much.

Because of my regular job as Provost for Health Sciences at West Virginia University and my most recent experience as Acting Director of the new State Health Department, I am in a somewhat unique position to observe medicine and health sciences in the State of West Virginia.

I want to share a few of these observations with you and make a few suggestions.

During the past six weeks, I have had contact with people from all over the state about a variety of health problems, ranging all the way from nursing homes to sewers. I have talked personally with over 200 legislators; have spoken with many others over the telephone, and have worked closely with the Governor and members of his staff. One thing is quite clear. Organized medicine, that is the West Virginia State Medical Association, has very little credibility with these groups.

Whether it is true or not, the fact remains that our image with these groups is as follows: An ultraconservative group that takes a negative point of view toward any proposal and is primarily interested in money. I don't believe that characterization truly represents the members of the State Medical Association. Yet true or not, it is how we are perceived by the public, and it is the image with which we have to deal.

Most members of the Legislature want and respect the opinion of physicians. Yet they complain to me that on any given issue, it has been impossible for them to find out just what the State Medical Association and doctors think about it. They always hear two or three stories. I am convinced that the executive branch of the state government wants to work with us. The fact that the Governor will be here tomorrow, and that Dr. Erik Farag, the Governor's Special Assistant for Health Affairs, is here today, I think is evidence of that, and I'm sure Dr. George Pickett, the new State Health Director, will want to work closely with us.

As an example of what can be done, on July 1 we had seven vacancies in county health officers' positions. I called Charlie Lewis in the State Medical Association office and asked the Association's help in filling these vacancies. I am pleased to announce that six of these, including one in Clay County, are now filled, and we hope to have the last one, Putnam County, filled by September 1. If that happens, it will be the first time, at least in the memory of Paul Shanks, the Assistant Health Director for Administration, that we will have part-time health officers in all 55 counties. I want to thank the State Medical Association for the help it has given me as Acting Director of the Department of Health.

Now as physicians, I think you will agree that it is not good enough to make just a diagnosis. One should also offer a treatment plan, and it is in this spirit that I want to offer a few suggestions as to how we might change our image.

First of all, while it is terribly important that we contribute to AMPAC and WESPAC, that is not enough. Not only must we give of our money, but most importantly, we must give of our time. We must develop a better mechanism within the Association to respond to the various issues that affect medicine. We must agree to a consensus position so that we can speak with one voice. Ideally, we will be proposing solutions to problems that face us, not just responding to solutions proposed by other groups. I suppose that the Council or the Executive Committee would be the best place for this response. One thing I am sure about, it can't be from the House of Delegates that meets only once a year.

We must participate in the Board and committees of the Health Systems Agency. In my opinion, this is already a disaster area with only

*Presented at the first session of the House of Delegates, 110th Annual Meeting of the West Virginia State Medical Association, the Greenbrier, White Sulphur Springs, West Virginia, Wednesday, August 24, 1977.

one practicing physician on the whole HSA Board. It is inconceivable to me that any type of effective statewide health planning can be done with this kind of representation. Doctor Farag agrees with me on this, and I have been assured that there will be more practicing-physician representation on the State Coordinating Council. If we get more representation, we must show up—and we must work more constructively.

There are other areas where our record is dismal. These are technical areas where only the physician can do the job. Let me give you two examples. The first is from my own area of interest, tuberculosis. The State Medical Association has had a committee on the control of TB for the 16 years that I have been in the state. However, I can't remember that the committee has ever met. Yet, the state still doesn't have an overall coordinated plan that takes into account the patients hospitalized in Pinecrest, Weston and the outpatient clinics. Maybe with the new Health Department organization this can be accomplished.

Another area is that of maternal and infant care. Our infant mortality rate is one of the poorest in the United States. A few weeks ago, the State Medical Association's Committee on Maternal and Perinatal Fetal Welfare met. Only two members of the Committee attended the meeting, and they discussed maternal deaths that went as far back as 18 months. We must do better in these problem areas where physicians represent the only source of a solution.

The State Medical Association has not taken the lead to solve any of our State's major medical problems. We must do better in this area.

Finally, I would like to second what Mr. James Farley, President of the West Virginia Hospital Association, said a few minutes ago. I propose that we must develop a much closer working relationship with other organizations that represent providers of health care. I am referring to the Dental Association, Nursing Association, Pharmacy, Hospital and Nursing Home groups. We have our difficulties with these groups, but if we look, we have many more things in common. Let us get together and publicly agree on those points that we have in common. If we do this, it will be much easier to resolve the issues upon which we disagree.

I would venture to speculate that if these groups ever agreed upon an issue before the Legislature and made their position known, their position would prevail without any difficulty whatsoever.

One final suggestion, which will probably be the least popular since it may mean a dues increase. I am convinced that we need either to rearrange our state office staff assignments or we need to hire somebody else, so that we have day-by-day close contact with the Governor's office, with the new Health Department and with the planning agencies. Decisions are made daily, not monthly, and we need someone there all of the time working closely with those making decisions to be sure our position is clear.

I don't like to sound negative, but I think these items are very important and I appreciate your listening to me. Thank you.

A message from . . .

The President

SOME HEALTHY INTROSPECTION

A special article in this issue of the *Medical Journal* sets forth for all our readers some candid observations about medicine, the health sciences and the State Medical Association as offered by a respected colleague, Dr. Charles E. Andrews.

These views and suggestions came in remarks made by Doctor Andrews, Provost for Health Sciences at West Virginia University who then was serving as Acting State Health Director, at our first House of Delegates session at The Greenbrier in August.

Doctor Andrews pulled no punches, and suggested he might be "drummed out of the lodge" for his frankness. He talked about the Medical Association's credibility, or lack of it, from his vantage point. He saw a critical need for doctors to respond, in legislative halls and elsewhere, to various issues affecting medicine. He called for a "consensus position," from which physicians might speak with one voice. In summary, he stressed a need for the Medical Association to do much better in a realistic leadership role toward solution of West Virginia's major medical problems.

Doctor Andrews won't be "drummed out of the lodge." Instead, he'll be congratulated and thanked by thinking, concerned physicians for expressing his views—and laying down a hard-nosed, common-sense challenge—so well.

If an organization can't stand honest introspection, it's in trouble. Please take a few minutes to read what Doctor Andrews has said—and then let's do something about his suggestions.

Joseph A. Smith, M.D.

JOSEPH A. SMITH, M. D., *President*

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EDITORIALS

PSRO REVIEW

Misunderstanding is developing on the part of physicians and of reviewers in regard to PSRO functions. Attending physicians become justifiably alarmed and indignant when they perceive their professional judgment in regard to individual patients questioned by reviewers. Some reviewers see it as their right and duty to second-guess attending physicians in individual cases.

If this is what professional review is to become, the alarm and indignation is quite appropriate and it is time, right now, to scuttle the entire PSRO apparatus. It is not built into the system, however, to require reviewers to question the professional judgment of any physician. It is not the purpose of a PSRO to shame, embarrass, degrade or humiliate anyone. When this occurs, the PSRO and the reviewer are wrong and should be reoriented.

The enabling PSRO statute permits physicians in each locality to set their own criteria for each diagnostic category establishing admission and treatment standards for that diagnosis, among those physicians in that area. The routine then calls for the attending physician to note from these same criteria those appropriate items, from the history and physical examination of each patient, which qualify that patient for admission under the admitting diagnosis. He then must study and treat the patient in accordance with the treatment parameters also previously established, or note reasons for deviating from these standards by reason of medical complications or revised diagnosis.

The attending should have been a party to the establishment of the criteria for admission and treatment. If the criteria are found to be unreasonable, unworkable or unattainable, the attending should seek revision of these through the medical staff of the hospital involved.

There should be no occasion for questioning an individual's medical judgment in any of this. Increased chart work is certainly required. Unfavorable review because of failure to note compliance with criteria is not equivalent to questioning the quality of medical judgment of any attending.

A critical element in the PSRO process is the MCES—Medical Care Evaluation Study. In this study, the charts of patients in one diagnostic category are analyzed for compliance with all of the criteria previously established for that diagnosis. Deviations from criteria are tabulated and presented to the Staff for study and recommendations for remedial action in regard to any deviations found. In this manner, appropriate continuing educational programs can be tailored to the apparent needs.

It is likely that the mere awareness of surveilance and the personal acknowledgment of the various criteria will make attending physicians vigilant to the possibility of certain economies in care and the opportunity for more timely discharges. It is unlikely, however, that any dramatic changes in practice will occur as a result of simple review. And these should not be expected.

Benefits should accrue, however, in changing patterns of care upon completion of the Medical Care Evaluation Studies. It is at this point that needed changes should become apparent and here that useful, educational remedies can be employed.

Overly enthusiastic reviewers should be discouraged in their sanctimonious posturing. In the past, such self-designated Oslers have made their presence known in various ways in the medical community and the profession in the past has had no use for them. We have none now.

The PSRO process is a fairly simple one: the attending physician states what in his professional judgment he is treating; he notes in what manner his patient meets the established criteria; he notes progress, complications or changes in diagnosis; the PSRO validates the fact that the above has been accomplished and later provides the attending and his colleagues the tabulated results of the care of that diagnostic category so that any needed group educational projects can be arranged.

If managed properly, by non-abrasive people, the PSRO process can benefit everyone, the paying public, patient, hospital, insurance carrier and the physician. There are, without question, a certain few physicians, deficient in a sense of responsibility, who are willing to attempt to sabotage or subvert the salutory aims of the PSRO program. To deal with the problem created by these few intransigents by saddling the remainder with inappropriate and unacceptable intrusions into their professional management of patients will likely result in rejection of the PSRO concept by all physicians.

ACCEPTING THE CHALLENGE ON HEALTH-CARE COSTS

"Physicians can and must play a major role in reducing or at least stabilizing health-care costs."

Those challenging words come from a leader in organized medicine at the state level — Richard J. Frey, M. D., Chairman of the Council (or Board of Trustees) of the Minnesota State Medical Association.

He is also Chairman of the Health Care Cost Commission sponsored by MSMA, and this is the group to which he directed those remarks.

The Commission, which held its first meeting in May, is conducting an 18-month study of rising health-care costs (with the help of a professor at the University of Minnesota's School of Public Health). It will issue "independent" recommendations that will go straight to the people without alteration.

Thus, MSMA is among the growing number of state medical societies that are eager to zero in on the cost problem, regardless of the complexities and possible outcome.

The Commission's members include representatives from civic affairs, industry, banking, insurance, state government, labor, and hospitals as well as from medicine. A state senator member was appointed by Governor Rudy Perpich, who strongly supports the Commission's efforts.

In diversity of makeup as well as purpose, it thus resembles the AMA medical-cost commission.

Doctor Frey, an internist, told the initial meeting in St. Paul:

"As an association, we could approach this situation in a variety of ways. We could, for example, say that the problem doesn't exist. Then again we could, as physicians, blame it on the hospitals, or government, or health planners, the insurance industry, the public, or some other entity than ourselves.

"Then again we could say that physicians as a group are a very significant contributing factor to the question of costs. Although physician fees are a small part of the health-care dollar, as a group, physicians serve as purchasers of medical and health care for their patients and as such are indeed a major factor in determining the extent of total health-care expenditures in this nation."

The Commission's final report will include:

A definition of the health-care delivery systems in the state, an identification of Minnesota and national forces creating increases in health-care costs, a review and evaluation of existing research on the causes of such increases, a review of Minnesota health-care systems outside the traditional fee-for-service system, and detailed recommendations for future programs that would contain costs while providing high-quality care.

The findings should be awaited with eagerness. And with a spirit of faith in what we in organdized medicine can generate on our own.—*Guest editorial by the American Medical Association.*

THE KIND OF SYSTEM WE DO NOT NEED

A highly refreshing exercise when time permits—and that's all too infrequently— is a perusal of other medical society journals and publications to see what colleagues elsewhere are offering in the form of editorial comment.

In one such bit of reading, we ran across some observations a Richmond, Virginia, physician was able to garner first-hand with regard to the medical system in England. We are indebted to the monthly publication of the Medical Society of Virginia, *Virginia Medical*, for being able to pass along that physician's reaction to our readers.

"Because our fate seems so closely entwined with that of Great Britain, and because our . . . administration in Washington has spoken so

much about the need for a national health plan, a current view from England may be revealing," the Richmond physician told his compatriots in that city's Academy of Medicine. Here is the remainder of his presentation:

"This past summer I had the privilege of inspecting the English medical system first-hand, visiting the great medical centers and talking with physicians. One, Dr. Gordon Cummin of Midhurst Hospital, is an architect of Britain's National Health Services Act. He remains admittedly partisan to the Plan (most British physicians oppose it), but he provided some interesting information about its origins and workings.

"In 1836, the 'Corn Laws' of England were enacted, partly to deal with farm vagrants who had moved to town and were unable to find work. These people were given clothing, food, shelter, and free medical care. In 1911, Prime Minister David Lloyd George had laws passed putting the poor and the destitute on free medical care and giving them other amenities. In 1942, Lord Beveridge, a Liberal Coalition member of Winston Churchill's wartime cabinet, was asked by Churchill to draw up a plan providing medical care for the remaining majority of the population. Lord Beveridge took into account certain factors, counting the gross national product and the portions allotted for health care with the only available figures, those of 1932-1937, and drew up his 'white paper.' It was accepted. Aneuryn Bevan, Minister for Health in the first post-war Labour government, was in charge of implementing Beveridge's program. Bevan boasted that he would 'win the doctors to his side by stuffing their mouths with gold.' There also was a distinct lack of unity among the royal specialty colleges at the time, adding to the confusion. Most physicians joined voluntarily.

"On July 4, 1946, the National Health Plan was set into motion. A year later, British MD's were quizzed about the Plan; most were reported to be in favor of it. This is not so now. Today, Britain's GNP is down, and the costs of medical care are rising sharply. North Sea oil is expected to stanch the hemorrhage only slightly, and will not affect the final outcome.

"The British experience shows unequivocally that government medicine is bad medicine—hazardous to the public's health. It is characterized by trade-unionism among doctors, by mountains of paperwork that makes our present load look like molehills in comparison, and by a surfeit of administrators. Ten years ago, Britain had more doctors than administrators. Now it has 30 per cent more administrators than doctors.

"Hear, for example, a spokesman for one of Britain's Regional Health Authorities: 'In some hospitals people waiting for nonemergency operations will never be treated. The waiting lists are already years long. So there's little chance that people in the 50 to 60-year-age group will be reached in their lifetime. They might just as well resign themselves to putting up with their discomfort. We will never catch up.'

"And hear British columnist Anthony Lejeune: 'Managerial control filters down through regional health authorities, area health authorities, and district management teams. Committees proliferate at each level; there are community health councils, family practitioner committees, local advisory committees, joint staff committees and innumerable specialist committees. The Department of Health and Social Services pours out a relentless stream of new orders; several hundred of these 'circulars' are issued each year.'

"Is this how we want it to be in America—in Virginia—in Richmond? I think not. Neither we nor our patients want to become pawns of a department of health services."

Our Readers Speak

Insect Bite Reports Wanted

Again this year I am compiling a Biting Insect Summary and would appreciate any case reports of unusual allergic reactions, especially systemic (sneezing, wheezing, urticaria) to bites of insects; i.e., mosquitoes, fleas, gnats, kissing bugs, bedbugs, chiggers, black flies, horseflies, sandflies, deerflies, etc.

I would like physicians to supply me with case reports of those patients who have had unusual reactions to such insects. Include in your reports the type of reactions (immediate and delayed symptoms), treatment, the age, sex, and race of the patient, the site of the bite(s), the season of the year, and any other associated allergies.

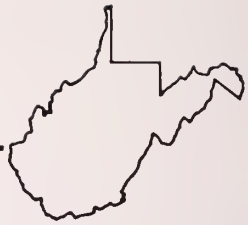
If skin tests and hyposensitization were instituted, I would like the report of both. Please note that it is the biting (not stinging) insect in which I am interested.

If you have found any insect repellent, local treatment, or insecticides of value, I would also appreciate this.

Please send this information to the following address:

Claude A. Frazier, M. D.
4-C Doctors Park
Asheville, North Carolina 28801

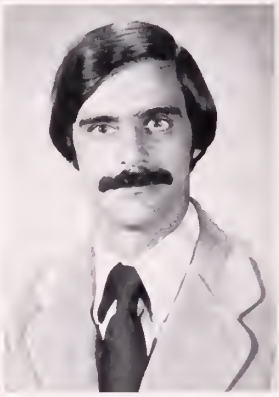
GENERAL NEWS



Legionnaire's Disease Among Mid-Winter Topics

"What You Always Wanted to Know About Legionnaire's Disease" and "How to Win Friends and Influence People in the Microbiology Laboratory" will be among the titles of scientific papers presented during the Eleventh Mid-Winter Clinical Conference next January 27-29 in Charleston at the Holiday Inn Charleston House.

David J. S. Hunter, M. D.



G. Paul Hlusko, M. D.

Some 14 prominent physicians will lecture during the annual continuing medical education event, which this year has as primary sponsors the West Virginia State Medical Association, the West Virginia University School of Medicine, and the Marshall University School of Medicine.

Doctors Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston, co-chairmen of the Program Committee, announced that the paper on Legionnaire's Disease will be presented by Dr. H. Bradford Hawley of Charleston, while Dr. Charles W. Stratton, also of Charleston, will discuss the microbiology laboratory. Both presentations will be during the Saturday afternoon session.

Doctor Hawley is Assistant Professor of Medicine, Charleston Division/West Virginia University Medical Center, and Chief, Infectious Disease Section, Charleston Area Medical Center.

Doctor Stratton is Assistant Professor of Medicine at the WVU Charleston Division and Chief, Microbiology-Serology Sections, CAMC.

The conference will begin Friday afternoon, January 27, and conclude at noon on Sunday, January 29, with scientific sessions scheduled for Friday afternoon, Saturday morning and afternoon, and Sunday morning.

The beginning session on Friday afternoon will be a symposium on "Birth Control and Estrogen Update," which will be repeated as a public program that evening.

A workshop-type session for physicians also will be held Friday evening. The program will include a presentation on the essential components of an effective medical audit, by Dr. Harry S. Weeks, Jr., of Wheeling, President of the West Virginia Medical Institute, Inc., and anticipated discussion of key health measures before the West Virginia Legislature.

A dinner session is scheduled for Saturday evening.

Other Speakers Announced

The Program Committee also announced the following additional speakers and topics (with day and session indicated):

"Mechanical and Other Non-Hormonal Techniques for Birth Control"—Narinder N. Sehgal, M. D., Director, Department of Obstetrics and Gynecology, WVU Charleston Division, Friday afternoon and evening;

"Estrogens for the Menopause—Yes or No?" —David J. S. Hunter, M. D., Associate Professor, Department of Obstetrics and Gynecology, WVU Medical Center, Morgantown, Friday afternoon and evening;

"The Use of Psychotropic Drugs with Children"—G. Paul Hlusko, M. D., Associate Professor and Child Psychiatrist, Department of Behavioral Medicine and Psychiatry, WVU Charleston Division, Saturday morning; and

George E. Pickett, M. D., Charleston, Director of Health, State of West Virginia, Saturday evening dinner (concerning the organization and purpose of the new State Health Department).

Previously announced speakers and topics were Drs. E. Noel McIntosh, Morgantown, "Present Status of Oral Contraceptives," Friday afternoon; John J. Schwab, Louisville, Kentucky,

"The Use of Psychiatric Consultation for the Practitioner," Saturday morning; W. Warren Point, Charleston, "Diagnosis and Management of Hepatitis," Saturday afternoon, and Arthur C. Chandler, Jr., Durham, North Carolina, "What's New in Ophthalmology?," Sunday morning.

Comes To WVU From California

Doctor Sehgal, who previously was a staff physician with the Kaiser Foundation Hospital in Sacramento, California, came to the WVU Charleston Division in January of 1975, receiv-ceiving his present appointment as Director of Obstetrics and Gynecology in July of that year.

He also was in the private practice of obstetrics and gynecology in Sacramento from 1963 to 1968, and was Chairman of the Department of Obstetrics and Gynecology (1967-68) at Mercy San Juan Hospital in Carmichael, California.

Doctor Sehgal is a Diplomate of the American Board of Obstetrics and Gynecology (1966) and is a Fellow of the American College of Obstetricians and Gynecologists and the Royal College of Surgeons of Canada.

His previous academic appointments include those as Instructor in Obstetrics and Gynecology at the University of Chicago School of Medicine; Assistant Director, Department of Obstetrics and Gynecology, Sacramento Medical Center, and Associate Clinical Professor, Department of Obstetrics and Gynecology, University of California, Davis, School of Medicine.

A native of India, he received his medical degree in 1954 from the Medical College in Amritsar, Panjab, India. He interned at Victoria Jublilee Hospital in Amritsar and Emory University Hospital in Emory, Georgia, and served residencies at the University of Maryland Hospital and Ottawa General Hospital in Canada.

Scotland Medical Graduate

Doctor Hunter received his medical degree in 1963 from the University of St. Andrews School of Medicine in Dundee, Scotland, and was an Assistant Professor of Obstetrics and Gynecology at the Oxford University Medical School in England from 1970 to 1975. He joined the WVU staff in 1976.

Doctor Hunter is a Fellow of the American College of Obstetrics and Gynecology and a member of the Royal College of Obstetrics and Gynecology.

In 1966-67, he was a research Fellow in Reproductive Biology at the Worcester Foundation for Experimental Biology in Shrewsbury, Massachusetts.

His research interests are in the fields of carbohydrate metabolism in pregnancy and in gynecological endocrinology.

Consulting Child Psychiatrist

Doctor Hlusko also holds the appointment of Assistant Professor of Pediatrics at the WVU Charleston Division and serves as Consulting Child Psychiatrist at the Early Childhood Diagnostic Center, Memorial Division, Charleston Area Medical Center; Bronco Junction World, Inc., Red House, Putnam County, and at Lakin State Hospital. He is Consulting Psy-

Shown during the 110th Annual Meeting of the State Medical Association at the Greenbrier, August 24-27, are (left photo) Dr. and Mrs. John J. Gaughan of Cleveland. Doctor Gaughan is President Elect of the Ohio State Medical Association. In the center photo, some of the physicians who attended the President's Reception for Honor Guests are (from left) Drs. Pat A. Tuckwiller of Charleston, C. R. Davisson, Weston, and Robert L. Smith, Morgantown. On the right are Drs. Richard E. Flood, Weirton (left), a Delegate of the State Medical Association to the American Medical Association, and L. Dale Simmons, Clarksburg.

chiatrist for the Childbirth Education Association of the Greater Kanawha Valley.

A member of the medical staffs of CAMC and Highland Hospital in Charleston, Doctor Hlusko was certified in 1976. He was born in Beckley, attended Huntington High School and West Virginia State College, and received his M. D. degree in 1967 from WVU.

Doctor Hlusko served his internship with Mt. Sinai Hospital Services in New York City, and was a resident in adult psychiatry and a Fellow in Child Psychiatry at Dartmouth Medical School (1967-72). He was an Instructor in Psychiatry at Dartmouth in 1971-72, and then spent two years with the U. S. Air Force as Chief of Professional Services and Mental Health at Lowry Air Force Base in Denver.

Assumed Health Post In September

Doctor Pickett assumed the position of Director of the reorganized State Health Department on September 1. A native of Morgantown, he previously was Director of the San Mateo, California, Department of Public Health and Welfare, and currently is President of the American Public Health Association.

Doctor Pickett heads a department that consolidated the old mental health department and its institutions, two general hospitals and charitable institutions formerly under public institutions, nursing home licensing and other health programs, into the health department.

He became Director of the San Mateo department in 1970. He previously was Public Health Director of the Detroit and Wayne County, Michigan, health departments. He also served as Assistant Chief in the Special Projects Section of the U. S. Public Health Service's cancer control program, and was Director of Chronic Disease Control for the Nebraska State Department of Health in the early 1960s.

Doctor Pickett, who also was a consultant to the Eppley Cancer Research Institute in Omaha, Nebraska, is a nationally-recognized authority on cancer research. He has written a number of papers and publications on cancer, leukemia control and the health factors of smoking.

Doctor Pickett holds a bachelor's degree from Harvard University, an M. D. degree from McGill University and a master's degree in public health from the University of Michigan.

His father, Dr. Justus C. Pickett, retired as Chairman of the Division of Orthopedics at the West Virginia University School of Medicine, but continues his private practice in Morgantown.

Other Conference Information

Serving on the Program Committee with Doctors Nestmann and Skaggs are Drs. William O. McMillan, Jr., of Charleston, and C. Carl Tully of South Charleston.

Attendance at the conference will be acceptable for Category 1 credit toward the Physician's Recognition Award of the American Medical Association; and the conference also is expected to carry prescribed credit by the American Academy of Family Physicians.

A registration fee of $20 for the entire conference, including the Saturday evening dinner, will be charged to all registrants except nurses, medical students, interns and residents. Dinner tickets for the latter registrants, spouses and other guests will be available at the registration desk.

Further details, including additional conference speakers, will be provided in later issues of *The Journal* as the program is completed.

Dr. John J. Mahood (left) of Bluefield, then President of the State Medical Association, talks with Dr. Raymond S. Brown of Gloucester, Virginia, during the 110th Annual Meeting of the Association in August at the Greenbrier (left photo). Doctor Brown is Immediate Past President of the Medical Society of Virginia. In the center photo, Dr. Robert B. Constantz (left) of Atherton, California, talks with Dr. Robert S. Mutch of Fairmont at a coffee break during the convention. On the right are Drs. William J. Kelly (left), President of the Pennsylvania Medical Society, and John R. Davis, President of the Medical & Chirurgical Faculty of Maryland.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977 and 1978, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Nov. 3	Wheeling	The CME Postgraduate in Family Practice
Dec. 1, 2	Morgantown	Current Concepts in Oral Contraceptive Treatment
Dec. 2, 3	Morgantown	Percutaneous Techniques for Pain
Feb. 20-24	Morgantown	Family Practice Review Course

AMA House To Meet December 4-7

The 1977 interim session of the House of Delegates of the American Medical Association will be held December 4-7 in Chicago (Palmer House).

Official notification of the meeting was published in the October 3 Journal of the American Medical Association.

Sessions will begin at 2 P.M. Sunday, December 4, and continue through Wednesday, December 7.

West Virginia's Delegates to the House are Drs. Frank J. Holroyd of Princeton and Richard E. Flood of Weirton, with Drs. Harry S. Weeks, Jr., of Wheeling, and George R. Callender, Jr., of Charleston, as Alternates.

For the first time, the AMA's Winter Scientific Meeting, formerly known as the Clinical Convention, will be held separately from the House of Delegates.

The Scientific Meeting will be held December 10-13 in Miami Beach, Florida. It will feature continuing education courses for physicians.

Association Accredits CME Program Of Hospital

The continuing medical education program of Herbert J. Thomas Memorial Hospital in South Charleston has been granted a one-year provisional accreditation for a newly developing program by the State Medical Association through its Committee on Medical Education and Hospitals.

The one-year accreditation was effective October 7, 1977, with credit for Category 1 of the Physician's Recognition Award of the American Medical Association retroactive to September 14, 1977, the date of the site survey of the hospital's CME program.

Serving on the survey team were Drs. L. Dale Simmons of Clarksburg, Chairman, and Charles E. Turner of Huntington.

Conference Site In Charleston Changed To Holiday Inn

The site of the Eleventh Mid-Winter Clinical Conference to be held in Charleston January 27-29 has been changed from the Daniel Boone Hotel to the Holiday Inn Charleston House, located at 600 Kanawha Boulevard, East.

The Holiday Inn Charleston House is holding a block of rooms for conference participants who may wish to register there. It is recommended that reservations be made as soon as possible. Be sure to specify that you will be attending the Eleventh Mid-Winter Clinical Conference.

A form for advance registration is contained on the promotional page for the conference appearing elsewhere in this issue of *The Journal.* Those who preregister will receive a pre-addressed, postage-paid postcard form for making reservations at the Holiday Inn. It should be noted that reservations also may be made directly with the Holiday Inn by telephone or letter. The telephone number in Charleston is (304) 344-4092.

President Completes Appointment Of Association Committees

Here are the remaining committees which have been named by Dr. Joseph A. Smith of Dunbar, President of the West Virginia State Medical Association, to function during his one-year term of office. Doctor Smith's other committee appointments were announced in the October issue of *The Journal.*

Constitution and Bylaws

Joseph T. Skaggs, Charleston, Chairman; George R. Callender, Jr., Charleston; Richard E. Flood, Weirton; Carl B. Hall, Charleston; J. C. Huffman, Buckhannon; Richard V. Lynch, Jr., Morgantown; Joseph B. Reed, Buckhannon; Harry S. Weeks, Jr., Wheeling; and J. Hugh Wiley, Morgantown.

Medical Education and Hospitals

R. James Yates, Beckley, Chairman; Charles E. Andrews, Morgantown; Leo H. T. Bernstein, Martinsburg; William H. Carter, Charleston; John S. Cook, Welch; Robert W. Coon, Huntington; Creel S. Cornwell, Jr., Clarksburg; C. Richard Daniel, Beckley; Del Roy R. Davis, Kingwood; Thomas O. Dotson, White Sulphur Springs; William J. Echols, Huntington; T. Keith Edwards, Bluefield; Albert C. Esposito, Huntington; Alfred D. Ghaphery, Wheeling; Robert D. Hess, Clarksburg; Guy F. Hollifield, Beckley; Winfield C. John, Huntington; George M. Kellas, Wheeling; George S. Kosar, Weirton; Mary Lou L. Lewis and William O. McMillan, Jr., Charleston; David Z. Morgan, Morgantown; Maurice A. Mufson, Dennis S. O'Connor and John F. Otto, Jr., Huntington; Benjamin L. Plybon, Ronceverte; Herbert H. Pomerance and Edwin M. Shepherd, Charleston; L. Dale Simmons, Clarksburg; Robert L. Smith, Morgantown; Michael M. Stump V, Elkins; John W. Traubert, Morgantown; C. Carl Tully, South Charleston; Charles E. Turner, Huntington; J. Hugh Wiley, Morgantown; and Joseph C. Woofter, Parkersburg.

Rural Health

N. Allen Dyer, Princeton, Chairman; Martha Jane Coyner, Harrisville; Harold D. Almond, Buckhannon; J. C. Arnett, Rowlesburg; Ralph H. Boone, Sistersville; B. S. Brake, Clarksburg; Robert W. Coplin, Elizabeth; Earl L. Fisher, Gassaway; O. M. Harper, Clendenin; Joe N. Jarrett, Oak Hill; Charles T. Lively, Weston; George Naymick, Weirton; and Charles J. Sites, Franklin.

Special Committees
AMA-ERF

J. Keith Pickens, Clarksburg, Chairman; Irwin M. Bogarad, Weirton; Russell R. Brandon, Chesapeake, Ohio; Harry F. Cooper, Beckley; John E. Echols, Richwood; John H. Gile, Parkersburg; Joseph Gilman, Clarksburg; Robert W. Howes, Jr., Parkersburg; Joe N. Jarrett, Oak Hill; M. Bruce Martin, Huntington; William T. Lawson, Fairmont; Buford W. McNeer, Hinton; David Z. Morgan, Morgantown; Donald R. Roberts, Elkins; George A. Shawkey, Charleston; John W. Trenton, Kingwood; Lysle T. Veach, Petersburg; and E. Andrew Zepp, Martinsburg.

Break-time tradition at the third annual Hal Wanger Family Practice Conference at West Virginia University Medical Center finds participants enjoying Eastern Panhandle apples. Discussing as they partake are (from left) Drs. C. Carl Tully of South Charleston, Robert L. Smith and John W. Traubert, both of Morgantown; William H. Wanger of Martinsburg, and Ray M. Kessel of Huntington. Held in September, the conference is named in honor of the late Halvard Wanger, M. D., who founded the Potomac-Shenandoah Valley Postgraduate Institute, a forerunner of the present course sponsored by WVU School of Medicine's Department of Family Practice and Office of Continuing Education, and the West Virginia Chapter, American Academy of Family Physicians.

Medical Schools Liaison

Robert A. Crawford, Jr., Charleston, Chairman; Kenneth J. Allen, Glen Dale; William E. Barnes, Parkersburg; Dewey F. Bensenhaver, Petersburg; Robert W. Bess, Jr., Piedmont; R. S. Birckhead, Gauley Bridge; W. T. Booher, Jr., Wellsburg; K. Douglas Bowers, Jr., Morgantown; A. Kyle Bush, Philippi; Terrell Coffield, New Martinsville; C. Richard Daniel, Beckley; Del Roy R. Davis, Kingwood; G. Thomas Evans, Fairmont; Donald E. Farmer, Charleston; Richard E. Flood, Weirton; John M. Grubb, Point Pleasant; Carl B. Hall, Charleston; Robert D. Hess, Clarksburg; J. C. Huffman, Buckhannon; Joe N. Jarrett, Oak Hill; Ray M. Kessel, Logan; Kenneth G. MacDonald, Charleston; Charles H. McKown, Jr., Huntington; Ross E. Newman, Mullens; Robert R. Pittman, Martinsburg; Russell A. Salton, Williamson; Robert G. Shirey, Lewisburg; L. Dale Simmons, Clarksburg; John W. Traubert, Morgantown; A. J. Villani, Welch; David E. Wallace, Madison; Deleno H. Webb III, Huntington; and J. Hugh Wiley, Morgantown.

SMA Annual Meeting November 6-9

A number of West Virginia physicians will attend the 71st Annual Scientific Assembly of the Southern Medical Association in Dallas, November 6-9.

Two scientific presentations during the meeting of the Section on Anesthesiology will be made by faculty members from the West Virginia University School of Medicine. Drs. John J. Rick and Simpson S. Burke will present a paper on "Respirator Paradox," while Drs. Anthony H. Entress and Michael B. Howie will discuss "The Effect of Acutely Raised Intracranial Pressure on Cardiopulmonary Hemodynamics."

Dr. M. Bruce Martin of Huntington is a member of the SMA Council, and Dr. Jack Leckie of Huntington is a Councilor-Elect. Dr. Albert C. Esposito, also of Huntington, is a member of the SMA Board of Trustees.

Mr. Max F. Lebow of Wheeling, a junior at WVU School of Medicine, is a Medical Student Representative to the meeting.

The 1978 meeting will be held November 11-14 in Atlanta.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Labor and Delivery: An Observer's Diary, by Constance A. Bean (introduction by Gerald Cohen, M. D.). 203 pages. Price $7.95. Doubleday & Company, Inc., Garden City, New York. 1977.

General Ophthalmology, 8th Edition, by Daniel Vaughan, M. D., and Taylor Asbury, M. D. 379 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1977.

Handbook of Obstetrics & Gynecology, 6th Edition, by Ralph C. Benson, M. D. 722 pages. Price $9.50. Lange Medical Publications, Los Altos, California 94022. 1977.

The Nervous System, by W. F. Ganong, M. D. 226 pages. Price $8. Lange Medical Publications, Los Altos, California 94022. 1977.

Review of Physiological Chemistry, 16th Edition, by Harold A. Harper, M. D.; Victor W. Rodwell, Ph. D.; Peter A. Mayes, Ph. D., D. Sc., and associate authors. 681 pages. Price $13. Lange Medical Publications, Los Altos, California 94022. 1977.

Current Surgical Diagnosis and Treatment, 3rd Edition, by J. Engelbert Dunphy, M. D.; Lawrence W. Way, M. D., and associate authors. 1139 pages. Price $18. Lange Medical Publications, Los Altos, California 94022. 1977.

Review of Medical Physiology, 8th Edition, by William F. Ganong, M. D. 559 pages. Price $12.50. Lange Medical Publications, Los Altos, California 94022. 1977.

Farley WVHA President

James L. Farley recently was elected to a second term as President of the West Virginia Hospital Association (WVHA) during its Delegate Assembly at the Greenbrier in White Sulphur Springs. Mr. Farley is Executive Director of Pleasant Valley Hospital in Point Pleasant and has served as WVHA President since October, 1976. He has been Executive Director of Pleasant Valley Hospital since 1971.

Medical Meetings

Nov. 4-5—W. Va. Chapter, Am. College of Surgeons, and WVU Dept. of Surgery, Morgantown.

Nov. 5-10—Am. Academy of Pediatrics, New York City.

Nov. 6-9—Southern Medical Assn., Dallas.

Nov. 8-10—Am. College of Emergency Physicians, San Francisco.

Nov. 18-19—AMA Regional Meeting, Hershey, Pa.

Nov. 27-Dec. 2—Radiological Society of North America, Chicago.

Dec. 3-8—Am. Academy of Dermatology, Dallas.

Dec. 4-7—AMA House of Delegates Interim Meeting, Chicago.

Dec. 5-7—Southern Surgical Assn., Hot Springs, Va.

Dec. 10-13—AMA Winter Scientific Meeting, Miami Beach.

1978

Jan. 23-25—Society of Thoracic Surgeons, Orlando, Fla.

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

Feb. 8-12—American College of Psychiatrists, New Orleans.

Feb. 22-26—Am. Assn. of Genito-Urinary Surgeons, Key Largo, Fla.

Feb. 22-26—Am. College of Nuclear Physicians, San Francisco.

Feb. 23-28—Am. Academy of Orthopaedic Surgeons, Dallas.

March 6-9—Am. College of Cardiology, Anaheim, Calif.

March 13-16—ACS, New Orleans.

April 5-6—W. Va. Chapter, Am. Academy of Pediatrics, Wheeling.

April 7-9—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

May 3-6—W. Va. Chapter, ACS, White Sulphur Springs.

June 17-22—AMA Annual Meeting, St. Louis.

Aug. 23-26—111th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Nov. 11-14—Southern Medical Assn., Atlanta.

BRIEF SUMMARY OF
PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

The West Virginia Medical Journal

Vol. 73, No. 12 December, 1977

Special Article

Physician, Look In Your Mirror!*

JOHN H. BUDD, M. D.
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President Jack (Mahood), officers, delegates, distinguished guests and lovely ladies, it is my pleasure to bring you greetings from the American Medical Association.

It is always redundant to state the obvious, but I must say, at the risk of being redundant, that it is a pleasure to be here at the Greenbrier. It is the second time I have had this opportunity, and I would like to take advantage of such an opportunity any time it is possible. It is perhaps hazardous to pick out people that you are particularly glad to see and risk omissions, but there are some here who are particularly dear to my heart. I would mention that my first impressions, of course, of what goes on in West Virginia were gained from your AMA delegates, Drs. Frank Holroyd and Dick Flood, backed up by Drs. Harry Weeks and George Callender as alternates.

I'm sorry Mrs. Chester Young hasn't come in; as President of the Auxiliary to the American Medical Association, she usually gets around where I do, usually with her traveling companion, Mrs. Linus Hewit, the President of the Auxiliary to the Southern Medical Association. I am sure that if one of them is here, the other will be and I look forward to seeing them. I'm also particularly pleased to see Dr. Carl Hall of Charleston. Naturally he would be here, being a West Virginian. I'm very proud of the American Academy of Family Practice, of which I happen to be a member, and Doctor Hall is a Past President of that group, the largest organization of specialists in the country.

I'm particularly delighted to see one of my cohorts from Cleveland, Dr. John Gaughan, President-Elect of the Ohio State Medical Association. I am also looking forward to seeing Carl Hoffman, Past President of the AMA. He and Lynn are special friends. Last, but by no means least, I'm particularly pleased to see representatives of our medical students. I would certainly recommend activities toward enrolling them as members of the State Medical Association. They are, along with the residents, the most rapidly growing part of the AMA membership, and one upon which we rely very confidently for the future of our Association.

Frequently Heard Criticisms

As I go about the country talking and listening to doctors and critics, reading newspapers, listening to the radio, and watching television, I find that the most frequent questions and comments I get from the physicians are concerned with the bad press that we too often receive, the unfair accusations that are leveled at us and the inaccurate information that is too frequently published about us. From our critics, I hear the charge that we are reactionary to progress. As was mentioned today, the impression circulates that we are negative in our attitude, and we are chided for an alleged lack of social responsiveness. . . .

We are attempting in several ways to cope with this set of circumstances. We have, for example, a proposal for establishment of a full-time President—a President who would be

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employed by the AMA, hired by the Board of Trustees to be an official spokesman, with special and writing skill, with continuity of tenure, instantly available to respond to questions, propositions and unfair accusations and who could be fired if ineffective. That proposition was considered by the House of Delegates at the San Francisco meeting. It was decided that it did have enough merit to warrant further consideration—at least that was the decision of the House—and it was referred to the Board of Trustees and the Council on Long Range Planning for study. It will receive consideration, beginning early next month, and there will be a report in December.

Of course, all of these positive points will be considered, and also the negative points, which also have to be weighed—whether this would take away the electoral prerogative of the House of Delegates to select a President; whether it might be interpreted by the public as emulation of labor-union type of organization; whether it would be a separation of the President from the grass roots; and whether it perhaps might not be as easy to dismiss an executive from a position like that as you might think. It will get serious consideration with a decision, of course, to be made by the House.

Best Spokesman

Regardless of the outcome, I personally feel that the best spokesman for the AMA, and the real "face" of the AMA, is the one that you see every morning when you look in the mirror, because I think that the AMA is each one of us. There is an abundance of accurate, straightforward, well documented, but unfortunately poorly recognized, facts about the AMA for which I think the well-informed, credible, trusted individual physician is the most influential evangelist.

Unfortunately, the AMA, like many institutions, is judged more by what it opposes than what it proposes. So I would like to speak briefly about the AMA's position and attitude on some of the major issues that face our profession and society. Today, as in the past, I am sure the AMA is following its constitutional obligation and pledge to promote the art and science of medicine and to better the public health. I would like to enumerate some of our programs and policies that indicate our responsiveness to social needs. We have actively supported programs, for instance, against venereal disease, against alcoholism, against drug abuse, against pollution of the air and water. We have instituted and supported programs for better care for rural dwellers. That is a difficult problem, which is by no means solved, as you know, in West Virginia and in many parts of Ohio, as well as other parts of the country.

We are trying to improve the health care for migrant workers. We are engaged in a program to try to improve the level of care for inner city dwellers, for American Indians and for crippled children. Currently, one of the programs which has drawn a lot of favorable comment is our crusade against excessive violence on television. Of course, one of the key organizations which is helping in that crusade is the Auxiliary. I would commend it for its help in that area. We have taken a positive position in support of programs of public education to the hazards of smoking. We have urged lessening of the depiction of alcohol drinking in movies and television as preferred social behavior. Recently, we have increased our efforts to warn people of the danger of delay in the treatment of cancer by unproven and discredited drugs and the risk of exploitation of cancer victims by unscrupulous pushers of substances such as laetrile.

There is a somewhat controversial issue on which I think the AMA House of Delegates has taken a proper position. The AMA is *for* the availability of health insurance on a nationwide basis, to be achieved by the expansion of the present system of private health insurance, to be largely financed by employer and employee sharing of premiums, which is the way most people have coverage now. Tax money would be used only for the purchase of coverage for the poor and unemployed, and any tax money to be used would come from general revenue, not from the nearly bankrupt Social Security system. We are, however, strongly *against* a national health *service* which would be federally financed, federally administered, federally controlled, and adrift in a sea of red ink.

Political Lesson

Recently the New York Times, which is not usually one of my favorite news sources, has stated, and I would like to quote: "The largest single centrally directed medical system in the country is already run by the federal government." They are talking about the Veterans Administration which operates 171 hospitals, employs about 200,000 people, including 16,000 doctors. The Times quotes a report from the National Academy of Sciences, a most prestigious organization, I'm sure you will agree, which very severely criticized the VA operation, mentioning unnecessary hospitalization, excessive lengths of stay, overuse of expensive facilities,

duplication of other expensive facilities which exist in the private sector of many cities, and the misuse of many drugs. The report in the Times concluded, "It is a pity that the VA's political success has so far outdistanced its medical achievements." That's a very strong statement. It's not made by the AMA; it's made by the National Academy of Sciences, and I think it is a very persuasive warning regarding a national health service.

We are *for* feasible efforts to contain medical costs, certainly one of today's most serious problems. The AMA has created and funded a national commission which will make recommendations for possible cost containment. The commission will endeavor to identify inevitable, unavoidable and completely justifiable costs from those where constructive efforts can be made, such as avoidance of overuse, overbuilding and duplication of expensive facilities. We are, however, *against* cost cutting which would threaten the quality of care or lessen the availability of necessary care.

So much for our position on these issues. I would like to refute some of the ill-based and unfair charges made.

Currently, our most savage assailant is the Federal Trade Commission. It has charged, I think very unreasonably, that the AMA—by participating with the AAMC (Association of American Medical Colleges) in the accreditation of medical schools—creates a potential for doctors to limit the number of schools and control the number of doctors in the country, and thereby keep prices up. Now, of course, this is an interesting example of inconsistency, because while the Federal Trade Commission is suggesting that the AMA is reducing the number of doctors, and thereby keeping prices *up*, the Health Care Financing Administration has recently decided that there are already too many doctors. The HCFA says that what should be done *is* restrict the number of doctors, because if you reduce the number of doctors you keep prices *down*. That is an example of governmental inconsistency and incoherence.

Now, for some other things that are happening at the present time. We frequently hear that care in the country is inferior, unavailable, and that statistics on health place us in an unfavorable position compared to other countries. I would say positively that the nation's health, and the health care system, are good, and they are getting better. They should get better. They are not perfect, but they are very good.

Access To Medical Care Improving

From the Robert Wood Johnson Foundation (also not run by the AMA) and from the National Center for Health Statistics, a government agency, have come some really encouraging reports regarding access to care based on the number of visits per person to a doctor per year. That has increased 20 per cent in the last five years. It used to be that people went to the doctor about five times a year on the average—now they go six times. I am not saying this improves the nation's health, but if access is one of the things that's faulty, access is improving. Another interesting thing about access is—and it's startling, but I'm told that it's true—the most frequent visitors to the doctors' offices now are people whose income is less than $3,000 a year, which, too, explodes the theory that access is related to the size of a person's bankroll or pocketbook. Finally, minorities, including black people, go to the doctor as often as do the rest of the population. So access has improved. Improvement can continue, but I would not just sit still and apologize for a deficiency as if no action were being taken.

Now let's turn to manpower and the argument that the AMA has always suppressed the number of doctors and the number of medical schools. There have been 30 new schools built within the last 15 years. There are 15,000 freshmen in medical schools this year, compared to 7,500 only 10 to 12 years ago. In 1970, there were 40,000 medical students in schools. At the present time, there are 60,000. That's an increase of 50 per cent.

Talking about the distribution of residents in training, the Manpower Act mandated at least 50 per cent of the residencies to be in primary care by 1980. At the *present time*, 57 per cent of the residencies are in primary care and they are largely filled by American graduates. As I mentioned before, the Health Care Financing Administration is concerned that there are now too many doctors. Of course, they are interested again in cost considerations, overlooking the element of quality.

We hear that there are too many hospital beds. Well, maybe there are; but, in beds per 100,000 population in the western world, including Europe, what country leads? Ireland, oddly enough. They have 205 per 100,000 people. The United Kingdom has about the same number and France has 133. All of the European nations have more beds per 100,000 population than we do. The United States has 90 beds per 100,000 population.

The average length of stay in acute hospitals in Britain is 13.2 days; in Sweden, it's 12 days, and in the United States it's 8.8 days.

Do we have too many surgeons? Maybe so. England, of course, has the smallest number per unit of population in Europe. I don't think you should consider the lowest to be the norm, unless everybody else is out of step. As a matter of fact, even the Kaiser Plan in this country, which is held up as a model, and is a fine system, I am sure, does more operations than they do in England. West Germany, Austria and Sweden all have less favorable mortality figures in surgical disease than does the United States. West Germany has more doctors per unit of population than any place in Europe, but the mortality figures are better in the United States, notably in such conditions as appendicitis, intestinal obstruction and prostate disease.

I listened to Uwe Reinhardt, an economist from Princeton—not the Princeton in West Virginia, but another Princeton in New Jersey—and he said the mortality rate associated with neoplasms in Britain tends to range 60 to 70 per cent higher than in the United States. Now, does that mean that the British operate less often and people therefore die of cancer at a higher rate, or that here we operate more and die at a lower rate of cancer? Certainly not. That's abuse of raw statistics. But, it's the type of statstical slander which is too often taken advantage of to make our system look bad.

Expensive, But Best

The more frequently voiced comment and criticism of our system is that it's the most expensive in the world, and it probably is. But, it's also the best, and there are many ways to prove that it is the best. As a matter of fact, our very successes create new costs. Take, for example, the premature, immature infant, who formerly would have died in a very few days. Now, because of neonatological skill and expensive equipment, that infant may survive.

Prolongation of life at the other end of the course in the older person increases the need for geriatric care which goes on for a long time, and is quite expensive. Kidney dialysis, for instance, is so effective it's almost a routine, but again, it's very expensive. The transplantation of kidneys, and to some extent other organs, often will prolong life for an otherwise doomed individual who might have died much earlier, and much less expensively.

These are not criticisms. These are facts of life, and those costs will have to be evaluated and either accepted or rejected. Research, for instance, may well, and probably will in the future, develop techniques whereby some diseases now incurable will become manageable. This means we may be keeping some people alive, at great cost. Imagine, if you will, an artificial heart, and I've heard people say this may become a fact within the next 10 years. I would assume such a heart will be very expensive, with constant monitoring equipment necessary for everybody who wears one. These are examples of the problems we must face; they are serious problems. They demand the judgment, counsel and compassion of doctors . . . not government regulation derived from a computer.

In order to improve our image and to correct false accusations, I believe that physicians, busy as we are in patient care, should make every effort possible to be aware of what the AMA, and what our local and state medical societies, stand for—what they are doing positively. We should also try to be available to inform the public and our elected representatives. We do urgently need public credibility.

I believe that the AMA is the strongest organizational voice from the standpoint of experience, resources and accessibility to influential sources to speak for our profession. We *do* have a strong organizational voice. However, we also need the positive, effective voice of the trusted and knowledgeable individual physician member.

Thank you very much.

Renal Calcium And Its Implications

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Current facts concerning calcium metabolism have provided alternative means of managing patients with recurrent renal calculi. Simplistic measurements of urinary calcium excretion before and after dietary calcium restriction offer a choice in treatment between dietary alterations and thiazide diuretics. It appears that renal calculi can be successfully reduced by these measures.

THE majority of patients with renal calculi have stones of either calcium oxalate or calcium diphosphate.[1,2] If one studies patients for specific underlying causes, a related illness (e.g. hyperparathyroidism, multiple myeloma, sarcoidosis, vitamin D overdose, thyrotoxicosis, gout, etc.) can be identified in only about one-third. A significant percentage of the remaining two-thirds, if studied appropriately, will demonstrate hypercalciuria either due to abnormalities in excess gastrointestinal absorption of calcium or in excess renal loss of calcium. These facts assume importance in management of patients with renal calculi.

Most Americans ingest a diet containing 600 to 900 mgm. of calcium daily. In normal persons there is very little variation of calcium excretion with moderate changes in dietary intake.[3,4] A good figure to use for top normal urinary calcium excretion is 275 mgm. for males and 250 mgm. for females per 24-hour period.

Absorption and Excretion Controls

Many hormonal and non-hormonal factors control the absorption and excretion of calcium. Vitamin D after absorption is stored in the liver; it is converted by a hepatic enzyme (25-hydroxylase) to the more active form 25- hydroxy cholecalciferol (25-OH-D_3). A more active metabolite of 25-OH-D_3 is formed in the kidney by hydroxylation at the 1 position-1, 25 hydroxy cholecalciferol or 1,25-$(OH)_2$-D_3. This compound, under the influence of parathormone secretion and stimulation, is more active than its parent compound, 25-OH-D_3, in promoting boney resorption of calcium from the gastrointestinal tract.[5] If the serum calcium is lowered, parathormone production is increased with the resultant stimulation of 1,25-$(OH)_2$-D_3 from the kidney. Both the rise in parathormone and 1,25-$(OH)_2$-D_3 are active in mobilizing calcium from bone but only 1,25-$(OH)_2$-D_3 promotes active calcium absorption from the gastrointestinal mucosa.

Parathormone also has an effect on the renal tubule in increasing the renal tubular reabsorption of calcium as well as promoting the urinary phosphorous excretion. The mechanism of this is depression of the urinary calcium, sodium and phosphorous at the proximal tubular level causing an increased delivery of all of these ions to more distal tubular sites. At the ascending limb in the loop of Henle only calcium seems to be responsive to the action of parathormone, resulting in renal tubular reabsorption of calcium from this level. The increased sodium delivered to this site is handled by other mechanisms whereas urinary phosphorous is excreted.[6,7]

Other Influencing Factors

There are several other factors operating to influence the renal handling of calcium which are important to know in managing patients with recurrent renal calculi.[6,7] There seems to be a rather good correlation between renal calcium and *sodium* excretion, almost approaching unity. If one expands the extracellular volume with saline, the glomerular filtration rate and urinary sodium rate increases as well as the urinary calcium excretion. Sontraction of the extracellular volume with a resultant decrease in urinary sodium excretion results in a fall of urinary calcium excretion. Contraction of the extrasodium, appear to be interdependent in terms of renal reabsorption at the proximal tubular level. Expansion of the extracellular volume by other methods (albumen, mannitol, etc.) or increasing the glomerular filtration rate does not produce the augmentation of urinary calcium noted with saline.

Magnesium increases in the serum appear to increase urinary calcium via some suppression of parathormone and an additional effect on inhibition of tubular reabsorption of calcium and sodium. *Thiazide diuretics* (Diuril, Hydrodiuril) work by contracting the extracellular volume, causing an increase in the proximal tubular reabsorption of sodium and calcium and

thereby decreasing urinary sodium and calcium loss. Dietary salt restriction helps achieve this hypocalciuric effect; salt loading will abolish this effect. Diuretics *ethacrynic acid* (Edecrin) and *furosemide* (Lasix), in contrast to thiazide diuretics (Diuril, Hydrodiuril), cause increased urinary losses of calcium by inhibition of calcium absorption in the region of the ascending limb of the loop of Henle. Carbohydrates tend to exaggerate urinary calcium excretion in those patients already predisposed to hypercalciuria.

Hypercalciurias

The two types of hypercalciurias can be classified in terms of their pathophysiology and therapeutic approach.[1,4] The *hyper-absorbers* have an increase in calcium absorption from the gut with resultant lowered parathormone production and an increased urinary calcium excretion. Urinary cyclic AMP excretion (which is responsive to parathormone stimulation) remains normal.[8] The second class, *renal wasters*, have a normal gut absorption of calcium but

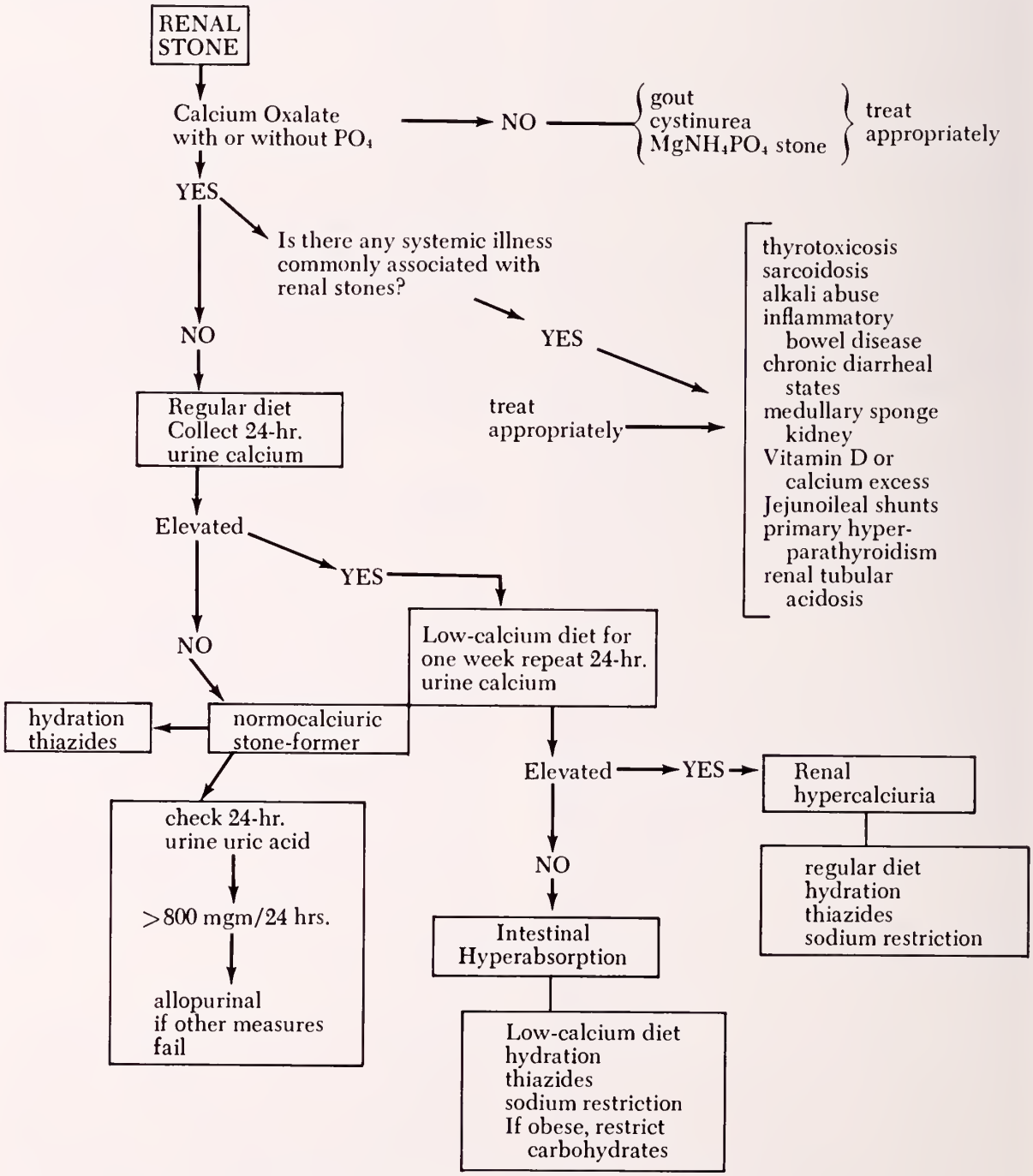

Figure. Flow chart for management of recurrent renal lithiasis.

are in negative balance because of the renal calcium loss. Elevated serum levels of parathormone are generally found as well as increased urinary excretion of cyclic AMP. Urinary calcium remains elevated even with dietary calcium restriction.

The remaining group of renal stone formers has normal urinary calcium excretions. Intermittent hypercalciuria for several days or transient hypercalciuria for a few hours during the day may be etiologically important. Increased excretion of urinary uric acid in idiopathic recurrent renal stone formers has been identified to be significantly higher than controls.[1] Whether the findings of hyperuricosuria, which might support a nidus for calcium stones and attempts to lower urine urate excretion, prove important remains to be determined.

In order to establish hypercalciuria the urine calcium collection should be performed preferably on an ambulatory basis on the patient's regular diet. Specific instruction should be given to the patient not to eliminate voluntarily calcium-containing foods during this period. Once hypercalciuria has been documented, the dietary calcium level should be lowered to less than 400 mgm. per day. Patients following this diet with hyperabsorptive hypercalciuria will show a fall in urine calcium to the normal range after one week of dietary calcium restriction. The group of patients with hypercalciuria due to renal calcium wasting will continue to show hypercalciuria with dietary calcium restriction.[4,8]

Therapy depends to some degree on findings (Figure). Adequate hydration, which is frequently difficult to enforce, consists of at least 12 glasses of water per day. Dietary calcium restriction should be undertaken in that group of patients in whom definite gut hyperabsorption of calcium can be identified, but not in those with renal hypercalciuria who are in negative calcium balance. Thiazide diuretics, coupled with sodium restriction which decreases the solute load and thereby decreases urinary calcium excretion, is valuable in the hypercalciuric and normocalciuric groups. Reducing hyperuricosuria by allopurinal administration may be effective in patients with recurrent calcium stones when other measures have appeared to be ineffective.

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Platelet Satellitosis And Other In Vitro Changes Induced By EDTA

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In 1963, Fields and MacLeod[4] reported a case of a patient in whom platelet-neutrophil adherence was observed in peripheral blood smears prepared from EDTA (ethylene diaminetetraacetic acid) anticoagulated blood. Subsequently, there have been approximately two dozen cases of this phenomena reported under the designation of granulocyte-platelet rosettes,[14] or more popularly, platelet satellitosis.[6,9] Although platelet satellitosis is thought to be relatively rare, we encountered four cases over a six-month period, three occurring during a one-month interval. These cases are presented and their clinical implications are reviewed.

Case Reports

Case one: M.D., a 28-year-old female Caucasian, was admitted to this hospital for a dilatation and curettage with laparoscopic tubal ligation. She was a gravida V, para II and abortus III who had experienced menometrorrhagia for several months. Physical examination was essentially negative. Laboratory studies revealed a hemoglobin of 13.5 g/dl, hematocrit 39 per cent, and a white blood count of 6,100/cu. mm. with a normal differential. Platelet count was 240,000/cu. mm. A prothrombin time and an activated partial thromboplastin time were normal. Wright's stained blood smears prepared from EDTA anticoagulated blood revealed the majority of neutrophils to contain from three to seven platelets adherent to the cell membranes. Platelet satellitosis was not observed in blood smears prepared directly or from oxalated or heparinized blood. Curettage and laparoscopic tubal ligation were performed without complications and the patient was discharged on her third hospital day.

Case two: T.W., a 41-year-old male Caucasian, was admitted for right sciatic pain of one-week duration. He had been seen in this hospital six months previously for a non-functioning gallbladder and duodenal ulcer. At that time, a pyloroplasty and vagotomy with cholecystectomy were performed without complications. Platelet satellitosis was not observed in blood smears prepared from EDTA-collected blood.

There was a strong family history of cerebrovascular accidents and myocardial infarctions occurring at early ages. During his recent admission, platelet satellitosis was observed in all blood smears prepared from EDTA-collected specimens. Admission hemoglobin was 14.9 g/dl, hematocrit 43 per cent and white blood cell count 7,900/cu. mm. with normal differential. Ivy bleeding time, clot retraction, fibrinogen, activated partial thromboplastin time, prothrombin time and prothrombin consumption were normal. Platelet satelliting counts were performed on smears by counting the number of platelets directly adherent to 100 consecutive neutrophils. In EDTA-prepared blood smears, scores at room temperature incubation were 61 for one hour and 206 for two hours. At 3°C incubation, the one-hour score was 39 and the two-hour score was 31. At 37°C incubation, the one-hour score was 21 and the two-hour score was 28. The patient was transferred to another hospital where an uneventful surgical repair of an intervertebral disc was performed.

Case three: J.S., a 55-year-old male Caucasian, was admitted for a comminuted fracture of the right os calcis. A closed reduction was done under general anesthesia without complications. Admission hemoglobin was 14.1 g/dl, hematocrit 42 per cent, and white blood count 10,500/cu. mm. Peripheral blood smears revealed marked platelet satellitosis in EDTA-anticoagulated preparations. Platelet satelliting scores at room temperature incubation at one hour were 286, two hours: 253, and three hours: 348; at 3°C incubation, one-hour score: 295, two-hour: 225, and three-hour: 250; and at 37°C incubation, one hour: 14, two hours: 9, and three hours: 3. The patient was discharged on his fourth hospital day.

Case four: M.E., a 63-year-old female Caucasian, was admitted for evaluation of episodes of recurrent dizziness. Bilateral carotid bruits were present. Carotid arteriograms revealed stenosis of both carotids, more marked on the right side. A right carotid endarterectomy was performed and the patient was discharged on the fifth postoperative day.

Blood smears prepared from EDTA-anticoagulated specimens on five consecutive days revealed marked vacuolization of neutrophils. On closer examination, platelets were observed in

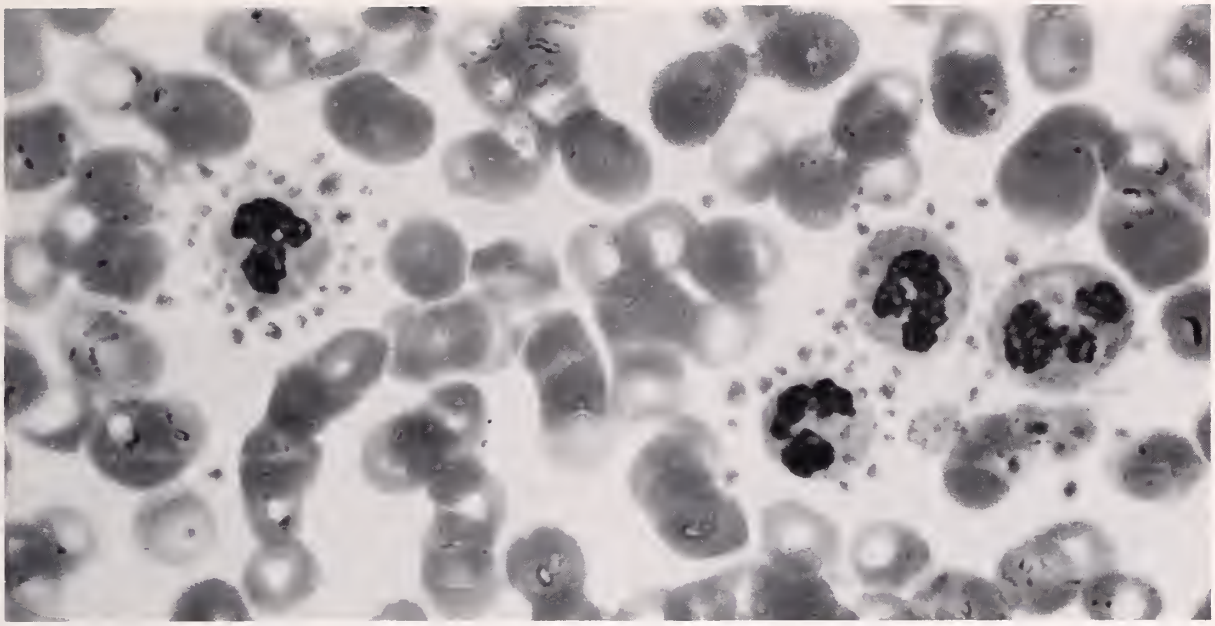

Figure. Platelet satellitosis, EDTA anticoagulated blood, Case four (1000x).

many of the vacuoles. The leukocyte differential count was within normal limits. Direct blood smears and smears prepared from oxalated blood revealed no similar changes. Platelet satelliting score in EDTA blood smears at room temperature incubation were 159 at one hour. Satellitosis after two hours' incubation was too numerous to quantitate since the majority of cells had up to 10 to 30 platelets clumped about each neutrophil. Many of the neutrophils contained two to six phagocytized platelets within vacuoles. An occasional monocyte also showed phagocytosis. Smears prepared from heparinized blood showed a platelet satelliting score of 38 with small amounts of phagocytosis.

Discussion

Since initially reported in 1963, a total of 24 cases of platelet satellitosis observed in EDTA-anticoagulated blood have been reported.[1,2,3,4,6,7,11,14,16,17,20] As in our cases, there has been no association with any specific disorder. The patients reported have ranged in age from 14 to 85 and had a wide variety of diseases including epilepsy,[1] carcinoma of the prostate,[1] alcoholism,[7] trigeminal neuralgia,[7] Behcet's disease,[14] diabetes with metastatic cholangiocarcinoma,[6] cirrhosis,[20] metastatic papillary carcinoma of the ovaries,[2] thrombocythemia,[11] head injury,[3] etc. The amount of satellitosis has shown no association with the severity of the clinical diseases, except in the case reported by Prchal and Blakely.[14] They describe a patient with Behcet's disease in whom the degree of satellitosis appeared to parallel the clinical severity of the disease as judged by the degree of mucosal ulceration. None of our patients or patients previously reported by other authors had any abnormal coagulation tests. Although *in vitro* platelet satellitosis does not appear to signify an existing thromboembolic tendency in patients, there have been a few reports where platelet satellitosis has been observed during, preceding and following thromboembolic phenomena such as cerebrovascular accidents, thrombophlebitis, myocardial infarction, and multiple arterial and venous thrombosis.[6,16] *In vitro* satellitosis has had no relation to any specific drug therapy. Three of our patients were on no medication at the time of recognition of platelet satellitosis.

Satellitosis is not an artefact of staining since it occurs in wet unstained preparations[8] in addition to films stained with Wright's stain, May-Grunwald-Giemsa and Leishman's stain. Platelet satellitosis appears to be confined to blood anticoagulated with ethylene diaminetetracetic acid (EDTA).[6,9] This is a heavy metal chelator which has gained popularity over oxalate and heparin in studies of platelets and in platelet counts by electronic particle counters due to its greater ability to prevent platelet clumping. In some studies, small degrees of satellitosis have been observed in other anticoagulants[1,4,6] or in non-anticoagulated blood.[16] In one of our cases, small amounts of satellitosis were observed in smears of heparinized blood. The phenomena can be associated with variable amounts of phagocytosis.[17] It appears to be maximal at room temperature, especially at one to two hours'

incubation.[6] Only small degrees of satellitosis, if any, are observed in blood incubated at 37 degrees. Response in the cold is variable. The phenomenon appears to be acquired and its presence can be quite variable during the course of patient follow-up.[1,16] The satellitosis appears to involve only neutrophils and bands, although a rare monocyte may show small satellitosis and phagocytosis. The platelets and neutrophils do not appear abnormal in morphology. Electron microscopic studies have shown that the contact between platelets and neutrophils is mediated by an electron-lucent space separating the plasma membrane with occasional phagocytosis.[9]

Many have attempted to identify a "Platelet Satellitosis Factor".[6] In studies we performed in cases two and three, patients' serum or plasma prepared from citriated blood could induce small degrees of satellitosis in EDTA-anticoagulated blood from normal individuals. Patients' white blood cells or platelets prepared in oxalate showed no satellitosis when mixed with EDTA-prepared blood of normal individuals. Kieldsberg found mixing of normal EDTA-separated plasma with white blood cells and platelets of affected patients caused no satellitosis.[9] Bolton found that EDTA-separated plasma from an affected patient could induce satellitosis in normal EDTA-collected blood.[2] He also noted that heating of the plasma to 70°C destroyed this activity. Hyan *et al*[6] found that the platelet satelliting factor was present in plasma of affected patients and could induce small degrees of satellitosis in normal patients in the presence of EDTA. The factor appears to be slow reacting since incubation enhances its activity.

There are other phenomena reported in peripheral blood *in vitro* induced by EDTA. Mant *et al*[12]reported three patients who had spurious thrombocytopenia due to degranulation and/or agglutination of platelets in EDTA. EGTA (ethylene glycoltetraacetic acid) also caused degranulation so that, on light microscopy, platelets were undetectable except as occasional ghost forms. Electron microscopy showed degranulation in EDTA-collected specimens. Plasma of these patients could induce degranulation in normal platelets in the presence of EDTA. Serum, crude gamma globulin fractions and serum from which either IgM or albumin had been extracted also caused degranulation while purified IgG fractions did not. Staven and Berg describe a "platelet stain preventing factor" in one patient active only in EDTA preparations stained either with May-Grunwald-Giemsa or periodic acid Schiff stains.[21] This was maximal at room temperature and weak or absent at 4°C and 37°C. By gel filtration and Sephadex filtration, this was isolated to a high molecular weight fraction. As opposed to the grey platelet syndrome, coagulation tests were normal. Both of the above phenomena were not associated with any satellitosis.

Shreiner and Bell describe six patients with platelet agglutination in blood collected in EDTA and DTPA (diethylene triaminepenta-acetate).[19] Plasma, serum and IgG fractions of serum from these patients agglutinated platelets of normal individuals in the presence of EDTA. Anti-IgG serum inhibited this agglutination. Gowland *et al*[5] reported a patient with reticulum cell sarcoma whose platelets agglutinated and degranulated in EDTA. This activity was located in the euglobulin fraction and could induce agglutination in EDTA-collected blood of normal individuals. Rhee also reports a case of platelet agglutination in EDTA resulting in spuriously low platelet numbers by electronic particle counting.[18] Ragan describes platelet agglutination in EDTA-collected blood in a miniature pig resulting in spurious thrombocytopenia, but oxalated plasma from this pig could not induce agglutination in EDTA blood from littermates.[15]

Recently, Petit *et al*[13] reported a case of autoimmune hemolytic anemia where *in vitro* red blood cells/neutrophil rosetting occurred in EDTA-anticoagulated blood. Over 75 per cent of the neutrophils had from 5 to 40 red blood cells adherent to their cell membranes. No rosetting was observed in direct films or films prepared from other anticoagulants.

Summary

All of these studies point out the difficulty laboratories may encounter if peripheral smears are prepared from blood anticoagulated in EDTA. In all cases of thrombocytopenia, there should be careful laboratory re-examination before an extensive or invasive clinical work-up is instituted. We experienced no difficulties with falsely low platelet counts in our cases since we use an oxalate procedure. Causes of spurious thrombocytopenia must always be excluded. These would include:

(1). Improper specimen collection.

(2). Inadequate anticoagulation.

(3). "Megathrombocytes" induced by anticoagulants and mistaken for white blood cells in phase counting methods.

(4). *In vivo* agglutination of platelets as reported in one patient with a cloth prosthetic aortic valve.[8]

(5). Platelet cold agglutinins.[8]

(6). *In vitro* changes in platelets induced by EDTA including satellitosis, agglutination or degranulation.

Also, with the advent of automated systems for performing leukocyte differential cell counts and red cell morphology, anticoagulant-induced platelet changes can again cause spurious results. For example, in systems utilizing EDTA-anticoagulated blood, platelet satellitosis can result in normal neutrophils being counted as "immature" due to the artefactual increase in cell size.[10] This again emphasizes that all *in vitro* abnormalities noted in peripheral blood must be correlated with morphology on direct smears and the patient's clinical status.

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Medical Grand Rounds

From the West Virginia University Hospital

Edited By
Irma H. Ullrich, M. D.
Assistant Professor of Medicine

Thyroid Carcinoma

Discussants:

STANLEY R. SHANE, M. D.
Professor of Medicine and Chairman of the Division of Metabolism and Endocrinology.

MICHAEL T. HOGAN, M. D.
Associate Professor of Diagnostic Radiology.

Doctor Shane:

Case History

This 56-year-old Caucasian woman had a goiter since her early teens. She was first evaluated in 1961 and was found to have a multinodular goiter with substernal extension. No therapy was recommended. In October, 1976, she presented with a left subclavicular mass which on biopsy was adenocarcinoma, most likely of thyroid origin. A total thyroidectomy was performed in January, 1977. Metastatic lesions were present on chest x-ray. ^{131}I scanning showed activity in the neck and superior mediastinum and she was treated with 100 mCi ^{131}I followed by suppression therapy with L-thyroxine.

Because of progressive symptoms she was readmitted in April, 1977. A six-cm. tender sternal mass had appeared. Bone scan showed uptake in the right shoulder, sternum, proximal left clavicle, left posterior 8th rib and two lumbar vertebrae. Chest x-ray showed a bilateral interstitial process. Biopsy of the sternal mass revealed papillary carcinoma.

She continued to deteriorate, and was dyspneic with bilateral rales and wheezes. She remained afebrile but had a persistent leukocytosis of 15,000. She was treated with 185 mCi ^{131}I. Two days later she developed diplopia and firm nodules on her scalp which later disappeared. On examination, she had a right lateral rectus muscle palsy. Her WBC climbed to 21,700, then to 32,200. Brain scan was normal. She was started on Dexamethasone.

She failed to improve and was extremely weak with evidence of generalized wasting and marked muscle atrophy of the lower extremities. Her WBC was 27,300. The alkaline phosphatase was 255 mIU/ml. (normal 24-120). Chest x-ray showed bilateral infiltrates with consolidation of the right middle lobe. Adriamycin was administered but her dyspnea increased and she developed fever for the first time. She failed to respond to all modes of therapy and died the evening of May 29.

Incidence of Thyroid Carcinoma

Thyroid carcinoma has an incidence of 3.9 per 100,000 population, which is a relatively low incidence compared to many other cancers. There are approximately 1,000 deaths per year attributed to thyroid carcinoma. This low figure may be due to its inherent tendency to be highly differentiated and relatively non-aggressive and slow in its growth rate. It also responds well to a variety of therapeutic modalities. Nevertheless, on occasion, it is a highly aggressive tumor which may kill its host. Therefore it is important to recognize this potential and very important to treat patients with this malignancy in a manner which will assure the best possible result. Thyroid carcinoma strikes women twice as often as men and its incidence increases with age.

Types of Carcinoma

A number of histological types have been identified: papillary and follicular (or mixed) are well differentiated as opposed to the poorly differentiated anaplastic variety. Papillary and mixed papillary-follicular comprise 60 to 80 per cent of tumors, while follicular comprises the bulk of the remainder. About five per cent consist of anaplastic, Hurthle cell and medullary carcinoma.

There are exceptions, but the data which have been collected on thyroid carcinoma (primarily papillary and mixed papillary-follicular) support the following observations:

1. The peak incidence is in the third and fourth decades.
2. The tumor tends to be more aggressive in males.
3. Only one nodule is palpated in the majority of cases.
4. There is enhanced survival in the younger age groups.
5. Highest death rates occur in adults over 40 at the time of diagnosis.
6. Thyroid scan shows "cold" or hypofunction of the nodule in question in the majority of cases.
7. There is an increased incidence in those who received therapeutic radiation exposure in childhood.
8. Multicentricity of tumor is common, particularly in those exposed to therapeutic radiation.
9. Carcinoma is very rare in hot nodules and unusual in a goiter associated with hyper or hypothyroidism.

These observations serve to guide physicians in their selection of patients who are at increased risk and those who should be subjected to diagnostic procedures and/or surgery.

Prognosis and Treatment

The prognosis for well differentiated tumors is very good, with 80 to 95 per cent survival at 20 years. Controversy still exists regarding the proper mode of therapy, which varies from suppression with thyroid hormone alone to radical surgery with ^{131}I ablation of remaining (and metastatic) tissue. Data exist which support the contention that the recurrence rate and survival is influenced by the extent of the thyroidectomy, but not by the extent of lymph node dissection. Although ^{131}I therapy is supported by many well known thyroidologists, there are those who feel it is unnecessary. All, however, agree on the necessity for thyroid hormone suppression. Our approach in most instances includes the use of ^{131}I postoperatively in those patients with significant residual thyroid tissue in the neck, and in particular, in those with functioning metastatic lesions. We do not believe radical surgery is necessary, but in general do advise total thyroidectomy with local node dissection.

In reference to the case presented for today's conference, I wish to emphasize that this disease may be fatal despite all modes of therapy, and also that a goiter of many years' duration may be associated with an increased incidence of malignant transformation. This is an important argument in support of treatment of goiters with lifelong suppression therapy.

Radiation-Associated Thyroid Carcinoma

Because of recent data which show a much higher incidence of thyroid carcinoma in those who have received therapeutic radiation exposure in childhood, all patients who give such a history should have a meticulous examination of their thyroid gland. The following is recommended in patients with a history of significant radiation exposure:

1. If no palpable abnormalities are found, re-examine yearly. Some physicians proceed to a scanning procedure even if the exam is negative. If the scan is abnormal the patient must be re-examined carefully, preferably by two examiners. If the exam is again negative, thyroid suppression therapy is advised. If a nodule is palpated, surgery is indicated. If the scan shows one or more hot areas the patient should be re-examined yearly.
2. If discrete nodules are palpated, surgery should be performed. If a scan is obtained and is normal (including oblique views), a trial of suppression therapy for six months is justified.
3. If the thyroid is diffusely enlarged and function is normal, suppression therapy may be instituted. Examination should be repeated in three to six months. If nodules appear, surgery should be strongly considered.

Doctor Hogan:

Thyroid Scanning-Technetium vs. ^{131}I

Radioactive nuclides are commonly used in the diagnosis and treatment of thyroid malig-

nancy. Basically, their application is divided into detection of the primary thyroid malignancy, detection of metastases and treatment. All three of these aspects are filled with controversy and the discussion below, in large part, represents opinion.

^{99m}Tc pertechnetate and ^{131}I are the two most popular radionuclides used in thyroid scanning. Both of these are readily available commercially. ^{131}I behaves physiologically exactly like non-radioactive iodine and therefore readily accumulates in the thyroid gland. ^{99m}Tc pertechnetate is trapped by the thyroid, but not organified. It is not utilized in the production of thyroid hormone and is released by the gland.

^{131}I has a half-life of 8.1 days. Its principal gamma energy is 364 kev which makes it easily detectable. However, ^{131}I also emits a beta particle which, combined with the long half-life, greatly increases the radiation dose to the patient. A 24-hour delay between administration of the radionuclide and the actual scanning procedure is also necessary with ^{131}I.

^{99m}Tc has a half-life of six hours, a sole gamma emission of 140 kev, and reaches its peak concentration in the gland in 20 minutes. Scanning can take place the same day of administration of the nuclide and is therefore more convenient. There is also a very low radiation dose, which is particularly important in the pediatric patient.

Although ^{99m}Tc is not as satisfactory as ^{131}I for substernal thyroids because of its low energy emission, the major objection to ^{99m}Tc lies in the evaluation of thyroid nodules. Some nodules that are cold with ^{131}I may appear warm or hot when ^{99m}Tc is used. Nodules which are cold with ^{99m}Tc will also be cold with ^{131}I. Approximately 20 per cent of solitary cold nodules on an ^{131}I scan are malignant and, since they may appear warm or hot on a ^{99m}Tc scan, a possible malignancy may not be discovered when ^{99m}Tc is used. To avoid a misleading conclusion, either ^{131}I must be the only nuclide used or, if a palpable nodule is warm with ^{99m}Tc, an ^{131}I scan must then be performed.

Detection of Metastases

Once a diagnosis of thyroid malignancy is made, total body scanning may be helpful to detect metastases. For this I believe two methods may be used. ^{131}I may be the only scanning agent, provided scans are done at approximately two hours and six hours as well as the usual scans done at 24, 48 or 72 hours. If this procedure is not followed, both a scan with ^{99m}Tc as well as a scan with ^{131}I must be performed.

Some thyroid metastases retain the ability to concentrate iodine and thus may be detected with ^{131}I scanning. This generally depends on the histology of the malignancy, with follicular and papillary carcinoma more likely to concentrate ^{131}I. Anaplastic and medullary carcinoma will not. Normal thyroid tissue, however, has a greater avidity for ^{131}I than metastatic thyroid deposits and it is therefore essential that the normal thyroid gland be completely ablated. This is accomplished by total thyroidectomy followed immediately by a single large dose of ^{131}I (approximately 75 mCi). Further stimulation of ^{131}I uptake by thyroid metastases can be achieved by withholding thyroid replacement therapy and thus increasing TSH levels. Some authorities would, in addition, directly administer TSH to the patient prior to the scan. The first scan is usually performed approximately two months after thyroidectomy. Depending upon the patient's status, repeat scans may initially be obtained at three- to six-month intervals, and then may be extended to yearly intervals.

A ^{99m}Tc scan may be helpful in those situations in which the thyroid metastasis has lost its ability to organify iodine but still retains its trapping ability. Technetium could detect these metastases. However, if the ^{131}I scans were performed at the time intervals mentioned above, this same trapping ability, and thus the metastases, would be detectable with radioactive iodine. Metastases may be missed with technetium pertechnetate in areas adjacent to locations in which the pertechnetate ion is normally concentrated (salivary glands, gastric mucosa), and also in areas where there is a large blood pool, such as the mediastinum.

Finally, if a bone metastasis is suspected, a bone scan with one of the ^{99m}Tc phosphate compounds should be performed.

Treatment

The use of radioactive iodine in the treatment of thyroid malignancy is reserved for those patients with metastases beyond the neck or in whom further surgery for recurrence in the neck is not feasible. Again to obtain maximum uptake in the metastases, total thyroidectomy followed by a large dose of radioactive iodine is necessary to destroy all normal thyroid tissue. Large doses of radioiodine (approximately 150 mCi) are then administered. This requires hospitalization, as the Atomic Energy Commission regulations require hospitalization until the patient contains less than 30 mCi of ^{131}I. Repeated

doses are given as necessary to control the disease or until a complication such as bone marrow depression occurs.

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 1/2 by 11 in.) white paper. Wide margins (at least 1 1/4 in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

A message from . . .

The President

THE FACE IN THE MIRROR

"The best spokesman for the American Medical Association (and we properly should add medicine as a whole), and the real 'face' of the AMA, is the one that you see every morning when you look in the mirror, because the AMA is each one of us."

Offering that observation was John H. Budd, M. D., of Cleveland, the President of the AMA, during his address to the State Medical Association's House of Delegates at The Greenbrier in August.

Doctor Budd's complete remarks appear elsewhere in this issue of *The Journal*, but the few words above strike perhaps the most important chord of the times as far as doctors are concerned.

We ARE the real 'face' of medicine. The well-informed, credible, trusted, individual physician CAN BE the most influential evangelist in getting across to modern society and the people in it the true facts as to medicine's concerns, and what organized medicine is trying to do about them.

Who better than the well-informed physician can really explain how and why we—and not someone else—have formulated health care programs of many types cutting across every segment of American life?

Doctor Budd's thinking stands as a challenge to all of us. And rather than using any more words here discussing it, let's turn to—get our 'face' in order, and generally get to work.

The best of the holiday season for all of you.

Joseph A. Smith, M.D.

JOSEPH A. SMITH, M. D., *President*

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EDITORIALS

A 'NEW LOOK' JOURNAL

Assuming that we can maintain our current planning momentum, readers of the *Medical Journal* will find a "new look" on their desks in January. For the first time in the memory of most of us, *The Journal* will offer a *new cover*—without any advertising!

There'll also be some revamping of section headings inside; and the first in a new series of "review" articles, this one on hypertension. Accompanying the article will be a series of questions about the material presented, with answers elsewhere in *The Journal.*

Current planning by the Editorial Board calls for three to four review articles a year. As many of our physicians know, time devoted to "individual reading of medical publications" can be counted toward the American Medical Association's Recognition Award, and hopefully these new offerings will encourage additional educational efforts by readers. Time devoted to medical publications falls within the PRA's Category 5(a). A maximum of 22 credit hours can be earned in this classification toward the 150 hours of total continuing medical education activity required over a three-year qualifying period for the recognition award.

Our new front cover format will be offered against a background also featuring a new color. The Editorial Board intends to keep the same color scheme for a volume, or calendar, year; and then change to a different one. This step will be designed to enable readers quickly to distinguish *The Journal* from month to month, while at the same time providing a means of filing or otherwise separating future issues by volume years.

For the past year or two, several new steps have been taken to provide a more readable, attractive and worthwhile *Journal.* These have included some changes in type, as well as cleaner, less "black" headings for scientific articles.

The revamping of the cover, however, will be the most significant change attempted in many years. It, again, represents a conscientious and seriously-considered effort by the Editorial Board toward a still-better *Journal.* The Board is hopeful that the change will stir a positive response, particularly among the many physicians who have asked over a long period of time, "When are we going to get advertising off our cover?"

Consistent with *The Journal's* policy, your reactions to these significant changes—both in format and of an educational nature—not only are desired, but are earnestly requested. One can't measure the depth of a stream unless there's water in it.

PRONUNCIATION OF MEDICAL WORDS

It is generally recognized that physicians are among the most highly educated of all classes of men and women. The great majority of physicians have had at least three years of preparatory work in college and many have had four or even five years. It is true that in many instances their college majors were taken in the biological or chemical sciences and not in the humanities; even so, they were exposed to men of learning and culture for several years.

As an educated man the physician should use care in the pronunciation of medical words. It is quite beyond the scope of this essay to attempt to call attention to all the medical words which are often mispronounced by the physicians; only a few examples will be given. A word often mispronounced is "eczema;" the accent should be on the first syllable, "ec'zema," and not "ecze'ma." The words "adult," "discharge,"

and "research" all have the accent on the last syllable. The correct pronunciation of the word "abdomen" is "abdō′men" and not "ab′domen;" and the word "duodenum" should be pronounced "duodē′num" and not "duod′denum." These examples probably will suffice. It might be regarded by some that these differences in pronunciation are small and of little consequence. This is faulty reasoning; educated and cultured people regard the correct pronunciation of these words of considerable importance.

There are cases when medical and general dictionaries do not agree on the pronunciation of a word. An outstanding example of this is "gynecology." This word has so many accepted forms of pronunciation that one hesitates to comment on any of them. In such a case about all one can do is to choose the pronunciation given in a standard medical dictionary. In this connection, another word comes to mind, namely, "syndrome." Medical dictionaries suggest that it be pronounced "sin-drōm," whereas general dictionaries suggest "sin-drō-mē." The author of this essay prefers the latter pronunciation, probably because he heard cultured men who taught in medical school he attended pronounce it that way.

In the final analysis, it must be recognized that all of us are prone to make mistakes in the pronunciation of medical words, as well as other words (such as "controversial" and "government"). It behooves us all to attempt to make as few errors as possible, and to pronounce words as suggested by standard medical or general dictionaries. The physician not only owes this to himself, but also to the educated and cultured patients he frequently serves.

LEST WE FORGET

It's increasingly clear that national health insurance—a subject which has been up and down like a yo-yo in public and congressional discussions during the last few years—again is headed for center stage in Washington. The Carter Administration is certain to push hard for such a program in 1978, although the form the proposal will take remains uncertain.

It's also likely that one of the major misconceptions of our times can get into the picture in substantial measure — the idea that national health insurance will mean dramatically better health for Americans. Most medical experts and economists agree that nothing could be farther from the truth. Recent testimony by the American Medical Association at a public hearing in Washington perhaps put the picture in the fairest sort of perspective.

Such a program (NHI) will *not* result in dramatic improvement in certain health statistics, either in the short term or the long term, the statement said. There is *nothing* in such a program, and virtually nothing that can be built into it, that will reduce death by homicide, suicide or auto accidents, the leading causes of death among Americans under 40. There is *nothing* in NHI that will induce Americans to stop smoking, prevent alcohol abuse or eliminate pollution, all of which affect our health status.

"Medical care," the statement emphasized, "is only one determinative factor in general well-being. No one should suffer unnecessarily for lack of access to quality medical care. Therefore, we endorse this concept (of available care for all).

"But let it be understood that any national health insurance program would not provide an all-encompassing magical answer to all health problems; there are limitations to what it can accomplish."

Aaron Wildavsky, Dean of the Graduate School for Public Policy at the University of California at Berkeley, has said that "the best estimates are . . . the medical system . . . affects about 10 per cent of the usual indices for measuring health. . . The remaining 90 per cent are determined by factors over which doctors have little or no control."

And Dr. John G. Freymann, offering testimony before a congressional committee as President of the National Fund for Medical Education, said:

"Every other nation that has adopted National Health Insurance has frozen its health-care system at that particular moment in its development. No other nation has been able to use (NHI) as a 'lever to move the earth.' On the contrary, (NHI) has made change slower and more difficult."

One can believe strongly in a fundamental objective to make available to all individuals in this nation the benefits of our health care system. But, as the AMA so well put it, "the degree of value that we as a people will reap from any national program for health insurance will be directly proportional to the degree of realism (including cost management) that goes into its creation.

"Thus, it is just as important to recognize what a program *cannot* do as what it *can* do, and to accept its limitations in presenting it to the American people."

We draw your attention to our letters column and the letter by Harry S. Weeks, Jr., M. D., President of the West Virginia Medical Institute, Inc. His letter is in response to our November editorial, *PSRO Review*.

MORE ON PSRO

We are grateful for Doctor Weeks' elaboration on sources of peer review problems within the state. Most notably, there appears to be some contest among the various administrative arms of the bureaucracy over which will have final say in telling doctors what they should have done after they do what they think is right.

This possibility was anticipated quite early in the thinking about achieving accountability for medical care. It was to counter such an unacceptable possibility that the decision was made to support a physician-organized and dominated *peer* review mechanism to accomplish the accountability needed.

The concept of PSRO was accepted by the medical profession on the basis of its medical educational value. It was the hope of politicians that, no matter what the basis of acceptance, economy and savings of tax dollars would result.

Doctors see in peer review quality assurance through an educational process; politicians see in peer review economy through a rationing process. Perhaps it is the old story of two blind men describing an elephant by touch, one from the north end and one from the south. The descriptions might sound irreconcilable, but both can be accurate.

The medical profession simply will not tolerate multiple reviews of its work. There are more valuable medical functions than to pacify the compulsive needs of counters and measurers while they engage in their ritualistic examination of medical statistics.

When push comes to shove, we will support the PSRO in any contest with a competing review body. Enough, we say, is enough!

Our Readers Speak

Profession Can Be Accountable

I find the editorial on PSRO review in the November *Journal* significant enough to merit an answer.

In PSRO review, physicians and reviewers are one and the same, reviewing medical necessity and quality of care. In retrospective review being performed by the fiscal intermediaries for Title XVIII (Medicare), physicians and reviewers are not necessarily one and the same. A review of the functions of the fiscal intermediaries set up under Medicare will show that they have functioned more like paying agencies than utilization review bodies.

Our situation at present is as follows: We (the doctors) perform concurrent review directly or indirectly (non-delegated or delegated) in 75 per cent of the acute hospitals in the state. We expect to be performing review in the remainder in the near future. If a hospital does not wish to participate, then the situation reverts to retrospective review or Title XVIII claims are simply not processed for payment. We use AMA *model screening criteria* and Southern Region PAS-LOS norms as general guidelines in helping coordinators (under direct supervision of physician advisors) check the levels of care and lengths of stay to be brought to the attention of physicians for future action.

At present, we are a conditional PSRO. As long as we are conditional, our decisions are being monitored by fiscal intermediaries for Title XVIII and XIX (Blue Cross, Mutual of Omaha, and the West Virginia Department of Welfare). The results of this monitoring apparently are causing the confusion. We do not know what their criteria are since, to my knowledge, they have not been set by any physician group known to the West Virginia State Medical Association or the West Virginia Medical Institute, Inc. The majority of cases kicked out are, as you suggest, on coverage issues and not related to quality of care. I take exception to one statement made: "There should be no occasion for questioning an individual's medical judgment in any of this." We are finding instances where judgments are and should be questioned. We have found that physicians can accept the role of their "brother's keeper" and as a result documentation is improving. Medical Care Evaluation studies are being performed in hospitals where they have not been performed before, and physicians are responding to being questioned. None of this existed in utilization review retrospective review programs of the past. It reflects the fact that the medical profession can be responsible and accountable to the public.

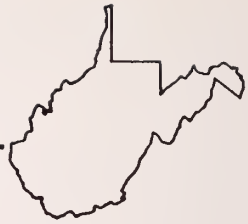
Another area of confusion exists in Southern West Virginia where a new review plan by Blue Cross has been been started. We have no part of this and suggest you contact Blue Cross for an explanation.

Approximately 1,000 cases have been received from the retrospective review monitoring process to date and sent to physicians throughout the state for their comments before selected cases are referred back to hospital utilization review committees for their consideration.

Overall, we find the quality of medical care in West Virginia to be excellent and capable of withstanding any scrutiny. That we are being subjected to hassles at an ever-increasing frequency is evident. In fact, I find myself sitting on the edge of the bed each morning wondering what the hassle of the day will be.

Harry S. Weeks, Jr., M.D., President
West Virginia Medical Institute, Inc.

GENERAL NEWS



Biofeedback, Dialysis, Drug Topics Wrap Up Program

Biofeedback, kidney dialysis, and "drug-drug" interactions will be the subjects of presentations completing the scientific program for the Eleventh Mid-Winter Clinical Conference, it was announced by the Program Committee.

The annual continuing education event will be held January 27-29 in Charleston at the Holiday

Charles W. Stratton, M. D.

Robert H. Hoy, Pharm. D.

Inn Charleston House, with the primary sponsors for 1978 being the West Virginia State Medical Association, the West Virginia University School of Medicine, and the Marshall University School of Medicine.

The program will begin at 2 P.M. on Friday, January 27, and continue through noon on Sunday, January 29. Scientific sessions will be held Friday afternoon ("Birth Control and Estrogen Update"), Saturday morning ("Behavioral Medicine and Psychiatry Update"), Saturday afternoon (Symposium on "Infections"), and Sunday morning ("Medical Potpourri").

Some 14 prominent physicians will lecture during the conference.

The beginning session on Friday afternoon, "Birth Control and Estrogen Update," will be repeated as a public program that evening.

A workshop-type session for physicians also will be held Friday evening; and a dinner session is scheduled for Saturday evening.

Here are the scientific and other speakers and topics—completing the conference program—announced by the Program Committee (with the day and session indicated).

"Your Educational Payoff from Medical Audit"—William F. Jessee, M. D., Assistant Dean for Continuing Medical Education, University of Maryland School of Medicine, Baltimore; and "Your Stake in Pending State Legislation"—Charles R. Lewis, Executive Secretary, West Virginia State Medical Association, Charleston (Friday evening Physicians' Session);

"The DES Story"—Patrick C. Williams, Jr., M. D., Charleston (Friday evening Public Session);

"The Use of Psychotropic Drugs with Children"—Arthur E. Kelley, M. D., Fellow in Child Psychiatry, Department of Behavioral Medicine and Psychiatry, Charleston Division/West Virginia University Medical Center (speaking in the place of Dr. G. Paul Husko—as previously announced—who will be unable to attend the conference); and "Medical Applications of Biofeedback"—Paul L. Crawford, Ph. D., Professor and Chairman, Department of Psychology, West Virginia State College, Institute (Saturday morning);

"Drug-Drug Interactions—A Pandora's Box"—Robert H. Hoy, Pharm. D., Assistant Professor of Clinical Pharmacy, School of Pharmacy, Charleston Division/WVU Medical Center; and "Use of Dialysis in Acute Situations"—Mary Lou Lewis, M. D., Medical Director, Kidney Dialysis Unit, Charleston Area Medical Center, and Clinical Associate Professor of Medicine, Charleston Division/WVU (Sunday morning).

The Program Committee also announced that Dr. Ralph J. Holloway of South Charleston will serve as Resource Person on Male Contraceptives for the Friday afternoon and evening sessions on "Birth Control and Estrogen Update."

The conference is approved for 12 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association—and also is acceptable for 12 prescribed hours by the American Academy of Family Physicians.

Holds College Post Since 1968

Doctor Crawford has held his present position at West Virginia State College since 1968 and, since 1976, has been Adjunct Professor of Psychology in the College of Graduate Studies there.

Doctor Crawford is Clinical Professor of Behavioral Medicine and Psychiatry at the Charleston Division/WVU, and serves as Clinical Psychology Consultant for Camp Bronco Junction for asthmatic children in Putnam County.

He was in a staff position in the Personnel Department of the Ohio Power Company from 1953 to 1962, and then held several teaching posts in psychology at Ohio University before going to West Virginia State.

Doctor Crawford received has undergraduate education at Ohio University, earning his Ph. D. degree (Clinical Psychology) in 1967 from that institution. His other fields of specialization are in behavioral measurement, applied research, and industrial psychology.

The author of some 20 scientific articles, Doctor Crawford is a member of the American, Midwestern, West Virginia, and Southeastern psychological associations, and The American Association for Advancement of Science.

Educated in California

Doctor Hoy joined the WVU staff this year after completing a residency in Hospital Pharmacy at the University of Illinois Hospital.

He was graduated from the University of California at Santa Barbara with a degree in Chemistry, and received a Doctor of Pharmacy degree in 1976 from the School of Pharmacy of the University of California at San Francisco. He was class President in 1972-73 at UCSF.

Former Director of Medicine

Doctor Lewis, who also is in private group practice in Charleston, was Director of Medicine from 1971 to 1975 for the Charleston Division/WVU and CAMC, and Chief of Nephrology at those two institutions in 1975-76. Currently, she also serves as Consultant and Director for the kidney dialysis unit at St. Joseph's Hospital Center in Parkersburg.

A native of Madison, in Boone County, Doctor Lewis was graduated in 1954 from the Duke University School of Nursing. After serving in various fields of nursing until 1960, she entered the Emory University School of Medicine, receiving her M. D. degree in 1965.

From 1965 through 1968, she was a medical intern and Research Fellow in Renal Physiology at The New York Hospital-Cornell University Medical Center. She then completed a residency in medicine and training in clinical nephrology at the University of California Medical Center of San Francisco (1968-1971).

Doctor Lewis is a member of the International Society of Nephrology, the Renal Physicians Association, American Society of Nephrology, American Society of Internal Medicine, West Virginia Kidney Foundation Medical Advisory Board, and the National Kidney Foundation Council on Dialysis and Transplant.

Other Speakers

Previously announced topics and speakers were:

Friday Afternoon and Evening: "Present Status of Oral Contraceptives," E. Noel McIntosh, M. D., Morgantown; "Mechanical and Other Non-Hormonal Techniques for Birth Control," Narinder N. Sehgal, M. D., Charleston, and "Estrogens for the Menopause—Yes or No?," David J. S. Hunter, M. D., Morgantown;

Saturday Morning: "The Use of Psychiatric Consultation for the Practitioner," John J. Schwab, M. D., Louisville, Kentucky;

Saturday Afternoon: "Diagnosis and Management of Hepatitis," W. Warren Point, M. D., Charleston; "How to Win Friends and Influence People in the Microbiology Laboratory," Charles W. Stratton, M. D., Charleston, and "What You Always Wanted to Know About Legionnaire's Disease," H. Bradford Hawley, M. D., Charleston.

Saturday Evening Dinner Session: "Changing Medical Care," George E. Pickett, M. D., Charleston, Director of Health, State of West Virginia.

Sunday Morning: "What's New in Ophthalmology?," Arthur C. Chandler, Jr., M. D., Durham, North Carolina.

Comes To Charleston in 1976

Doctor Stratton, who will speak on the microbiology laboratory Saturday afternoon, is Assistant Professor of Medicine, Charleston Division/WVU Medical Center, and Chief, Microbiology-Serology Section, CAMC. He came to Charleston in 1976 after serving for one year as Instructor in Medicine at the University of Colorado Medical Center in Denver.

A native of Worcester, Massachusetts, Doctor Stratton was certified in 1974 by the American Board of Internal Medicine and again certified by that Board, in Infectious Disease, in 1976.

Doctor Stratton was graduated from Bates College in Lewiston, Maine, and received his M. D. degree in 1971 from the University of Vermont in Burlington.

He served an internship and residency in Medicine at the Medical Center Hospital of Vermont, in Burlington, and was a Senior Resident in Medicine and Research Fellow in Infectious Disease at the University of Colorado Medical Center.

The author or co-author of some 10 scientific abstracts and articles, Doctor Stratton is a member of the American College of Physicians and the American Society for Microbiology.

Other Conference Information

Serving on the Program Committee are Drs. Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston, Co-Chairmen; and William O. McMillan, Jr., of Charleston, and C. Carl Tully of South Charleston.

A registration fee of $20 for the entire conference, including the Saturday evening dinner, will be charged to all registrants except nurses, medical students, interns and residents.

All extra tickets (not included in the registration fee) for the dinner session Saturday evening must be purchased by 10 A.M. on that day. Such tickets ($7.50 each) would include those for spouses and other guests—and for nurses, medical students, interns and residents.

These tickets will be available at the registration desk beginning with registration Friday afternoon.

All other registrants paying the $20 fee will receive their dinner tickets when they register at the conference.

The final arrangements for the program, including the physicians who will preside at the scientific and other sessions, will appear in the January issue of *The Journal.*

Doctor Waldman Tennis Winner

The doubles team of Drs. Harold L. Saferstein of Wheeling and Robert H. Waldman of Morgantown finished in third place in the men's tennis tournament held during the 110th Annual Meeting of the State Medical Association last August at the Greenbrier in White Sulphur Springs. An article in the October issue of *The Journal* listed Doctor Saferstein and Dr. Richard Wanderman of Charleston (instead of Doctor Waldman) as the third-place winners.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1977 and 1978, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of *The Journal.*)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Charleston and Wheeling campuses as well as in Morgantown. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, P. O. Box 2867, Charleston 25330; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Dec. 1, 2	Morgantown	Current Concepts in Oral Contraceptive Treatment
Dec. 2, 3	Morgantown	Percutaneous Techniques for Pain
Feb. 20-24	Morgantown	Family Practice Review Course
Mar. 11	Morgantown	Annual Conjoint Behavioral Medicine—Internal Medicine Day
Mar. 17, 18	Morgantown	Cancer Teaching Day—Pediatric Oncology
Mar. 24	Charleston	Fifth Annual Newborn Day
Mar. 25	Wheeling	Seminar on Surgical Problems

Humanities Seminars For Medical Practitioners In 1978

The National Endowment for the Humanities, a federal agency, will continue its program of humanities seminars for medical practitioners in 1978. The seminars—which meet during the

summer at selected colleges and universities—will bring physicians and other health professionals together for a month of full-time study under the direction of distinguished philosophers, historians, and others.

The seminars are designed to give participants the opportunity to stand back from their work and explore the humanistic dimensions of their profession by studying such topics as the history of professional ethics in American medicine, moral dilemmas in medical practice, and the relationship between individual and public rights in health care. A second series of seminars open to the members of various professions, including health practitioners, will deal with the ethical dimension in contemporary life, value conflict in our society, the cultural foundations of United States-Asian foreign relations, individualism in American society, and contemporary religious movements.

From 12 to 15 persons will attend each seminar tuition-free, receiving a stipend of up to $1,200 to cover expenses, plus reimbursement for travel. Physicians, nurses, public health officials, hospital administrators, and other health professionals may apply. The application deadline is tentatively set for April 17, 1978. Further information about the seminars, application forms, and selection criteria, may be obtained from: Professions Program, Division of Fellowships, National Endowment for the Humanities, Washington, D. C. 20506; or contact: Mort Sosna, Donna Orsini Churchwell or Nancy Norman (202/724-0376).

Drug Company First To Receive AMA Category 1 Credit

Physicians attending seminars at Burroughs Wellcome Co., Research Triangle Park, North Carolina, are now eligible for the American Medical Association's Category I continuing medical education credit. The company is the first drug manufacturer to be granted such accreditation by the AMA Liaison Committee on Continuing Medical Education.

Last year, Burroughs Wellcome sponsored 100 medical and scientific seminars which were open to physicians and paramedical personnel.

For further information, physicians may contact: Stanley Grosshandler, M. D., Director of Continuing Medical Education, Burroughs Wellcome Co., 3030 Cornwallis Road, Research Triangle Park, North Carolina 27709, (919) 549-8371.

Family Practice Review Course At WVU In February

A Family Practice Review Course will be held February 21-24 at the West Virginia University Medical Center in Morgantown.

The course is sponsored by the WVU Department of Family Practice, the WVU Office of Continuing Medical Education, and the West Virginia Chapter of the American Academy of Family Physicians.

The course is accredited for 40 hours in Category 1 of the American Medical Association Physician's Recognition Award, 40 prescribed hours by the AAFP, and 4.0 WVU CEU's.

The registration fee is $200 for practicing physicians and $100 for other professional personnel.

The course topics for Tuesday, February 21, will be:

"Management of Urinary Tract Infection," "Acute Burn Management," "Inflammatory Bowel Disease," "Seizures in Children," "Family Dynamics with Battered Children," "Diagnosis and Management of Sexually Transmitted Disease," "Mechanism and Management of Hypertensive Emergencies," "Antibiotic Update," "Evaluation of Athletic Injuries," and "Antibiotic Review Course (Roche TV presentation);

Wednesday: "Occult Rectal Bleeding," "Management of the Asthmatic Child," "Interpretation of Blood Gases," "Warts, Moles and Calluses," "The EKG in Acute Infarction," "Interpretation of Thyroid Studies," "Diagnosis and Management of Glaucoma," "Managing the Diabetic in Ketoacidosis," and "Family Planning Concepts;"

Thursday: "Recognizing and Counseling Genetic Disorders," "The Drug Abuse Patient," "Evaluation and Management of Abnormal Pap Smears," "Coping with the Obese Patient," "Acne and Acneiform Lesions," "Evaluating Abdominal Trauma," "Eye Disease in Children," "Management of Anxiety and Depression," "Therapy for Obstructive Pulmonary Disease," "Peripheral Vascular Disease," and "EKG Review;"

Friday: "Enuresis Work-Ups," "Recognition of Perinatal Emergencies," "Current Concepts in Cancer Therapy," "Parasitic Infestations," "Children's Hip and Foot Problems," "Obstetrical Emergencies," "Peptic Ulcer Disease," and "Wrap-up, Evaluation."

AMA Winter Scientific Meeting December 10-13 In Florida

The 31st Winter Scientific Meeting of the American Medical Association will be held December 10-13 at Miami Beach.

For the first time the interim winter session of the AMA's House of Delegates was scheduled separately from the scientific meeting. The House session was called for December 4-7 in Chicago.

The Winter Scientific Meeting offers a cross-disciplinary continuing medical education program for the physician who needs to keep abreast of the latest developments in his own and other medical specialty areas.

The program for the Florida meeting was published in the October 24 Journal of the American Medical Association. It encompasses postgraduate courses covering the full range of problems encountered by the practicing physicion in his office. Some of the materials will be offered as video clinics and others as television courses and motion picture seminars.

State-of-the-art lectures will be presented on such topics as the "Pill"; prevention and treatment of stroke; origins of sex and gender; cosmetic surgery; coronary artery disease; snakebite; and the team doctor in amateur sports. The luncheon programs will discuss acupuncture; obesity; menopause, and television's impact on our way of life.

A satellite will be used to transmit specially prepared programs from the meeting at Miami Beach to physicians in 35 hospitals in 11 states on the other side of the nation.

The event will mark the first time anywhere in the world that a major medical meeting of multidisciplinary scope will harness the power of satellite technology to provide continuing medical education.

Physicians' Cooperation Asked In Social Security Claims

Editor's Note: Below is an "Open Letter to West Virginia Physicians" from the Disability Determination Section of the Social Security Administration in Charleston. We are providing this information to *Journal* readers in the hope that it will be beneficial to all parties concerned.

"Many of your patients make application for benefits to the Social Security Administration. The SSA has responsibility for administering two programs, both of which use essentially the same *medical* criteria.

"The first program requires that your patient, or someone financially responsible for your patient, has worked in covered employment for a substantial period of time. There is no 'need' requirement. This is Social Security Disability Insurance.

"The second program, Supplemental Security Income, involves a financial need and benefits are limited. There is no work record requirement.

"The primary requisite for making a determination of disability is *objective* medical evidence, including clinical signs, laboratory findings, and diagnostic test results. No one is better qualified to give this evidence than you, the attending physician.

"If we can get *good initial* reports we can often process a claim within days rather than weeks and can save additional costs, which are considerable. Our main need is documented residual function (or the lack of it) so that our team of physicians and examiners can apply the medical facts to the patient's economic, employment, and environmental situations.

"The evidence needed for adjudication of each claim is itemized in a Handbook for Physicians entitled, 'Disability Evaluation Under Social Security'. If you do not have a copy of this booklet and would like to have one, write: Austin W. Miller, Medical Relations Officer, c/o Disability Determination Section, 1206 Quarrier Street, Charleston, WV 25301. Telephone (304) 348-5340."

MU Medical School Receives First Capitation Grant

The U. S. Department of Health, Education and Welfare has awarded Marshall University's School of Medicine a $39,500 Health Professions Capitation Grant, Dr. Robert W. Coon, Dean of the Medical School, announced.

"These funds come with relatively few strings attached and may be used to further the school's development as we deem appropriate," Doctor Coon said.

This is the first grant the medical school has received under this particular federal program. However, the school earlier received $240,000 in start-up funds from HEW, he said.

The school is actively pursuing additional federal grants for residency programs, staff training and student assistance, in addition to seeking funding from private foundations and other sources for faculty research.

The MU medical school, which received provisional accreditation from the Liaison Committee on Medical Education on October 26, will enroll its first class of 24 students on January 3.

Ophthalmology-Otolaryngology Academy Re-Accredited

The West Virginia Academy of Ophthalmology and Otolaryngology and its annual National Spring Meeting has been re-accredited for continuing medical education by the State Medical Association through its Committee on Medical Education and Hospitals.

The Academy was granted a full, three-year accreditation, effective retroactively to July 14, 1977.

The CME program of the Academy was resurveyed by Dr. Mary Lou Lewis of Charleston on April 25 during the Academy's 30th annual National Spring Meeting, April 24-27.

Anesthesiologists To Meet Next June In Morgantown

The West Virginia State Society of Anesthesiologists will hold its annual meeting, "Anesthesia Update '78," on June 10, 1978, in Morgantown at the Lakeview Inn and Country Club.

The speakers will include Drs. Phillip Bridenbaugh, Professor and Chairman, Department of Anesthesiology, University of Cincinnati Medical Center; Mark Ravin, Professor and Chairman, Department of Anesthesiology, University of Kentucky, Lexington;

C. Robert Stephen, Professor and Chairman, Department of Anesthesiology, Washington University, St. Louis, Missouri, and Henry L. Price, Professor and Chairman, Department of Anesthesiology, Hahnemann Medical College, Philadelphia.

EENT Academy Announces 1978 Meeting

The National Spring Meeting of the West Virginia Academy of Ophthalmology and Otolaryngology will be held April 26-29, 1978, at the Greenbrier in White Sulphur Springs.

Ophthalmology speakers will include Drs. Robert C. Drews of Clayton, Missouri, Jared M. Emery, Houston, Texas; Richard P. Kratz, Van Nuys, California; Bruce E. Spivey, San Francisco, and Bradley R. Straatsma, Los Angeles.

Speakers for the Otolaryngology program will be Drs. William Jacquiss and Donald Kamerer, both of Pittsburgh; Walter Work, Ann Arbor, Michigan, and Charles Yarington, Seattle, Washington.

Checks for the registration fee of $225 should be made payable to the Academy and addressed to: J. Elliott Blaydes, M. D., The Blaydes Clinic, Corner of Frederick and Woodland Avenue, Bluefield 24701.

Hotel reservations should be made directly with the Greenbrier.

Cornell Professor Named To AMA Education Post

E. Lovell Becker, M. D., of the New York Hospital-Cornell Medical Center, New York City, has been named Director of the American Medical Association's Department of Graduate Evaluation.

Doctor Becker's appointment, effective January 1, was announced by Richard L. Egan, M. D., head of the AMA's Division of Standards and Evaluation, a unit of the AMA Group on Medical Education.

A graduate of the University of Cincinnati College of Medicine, Doctor Becker, since 1957, has been associated with Cornell Medical Center, and presently is Professor of Medicine and Director of the Office of Continuing Education and Regional Activities.

Doctor Becker has held hospital and teaching appointments at the University of Cincinnati College of Medicine, Medical College of Virginia, Bellvue Hospital in New York City, New York University College of Medicine, and Oak Ridge Institute of Nuclear Studies. As an officer in the U. S. Air Force Medical Corps he was on special assignment at the Andean Institute of Biology in Peru.

A Diplomate of the American Board of Internal Medicine, he also is a Fellow of the American College of Physicians, the New York Academy of Sciences and Royal Society of Medicine. He is a member and Past President of the Explorers Club of New York and the Cosmos Club of Washington, D. C. Doctor Becker also is affiliated with a number of professional journal editorial boards and is active in leadership positions with the Joint Commission on Accreditation of Hospitals.

The physician is author of more than 100 professional journal reports and a number of books.

FDA Limits Use Of Intraocular Lens Under New Law

The Food and Drug Administration established new safeguards for the use of intraocular lenses in November.

Intraocular lenses are plastic lenses surgically implanted in the eye following removal of the natural lens, most frequently because of cataracts.

Until now, intraocular lenses have been generally available for use by eye surgeons. Last year, however, Congress passed the Medical Devices Law, which gave FDA increased authority over devices such as intraocular lenses.

The new requirements, published November 11 in the Federal Register, limit intraocular lenses, including those now on the market, to investigational use only.

This means that physicians who want to implant lenses must participate in a formal investigation. The results of their findings must be submitted to FDA.

It also means that patients must be informed in writing about the risks and benefits of intraocular lenses before implantation and sign a form stating that they understand the terms of the investigation in which they are participating.

On the basis of these investigations, manufacturers will accumulate information to apply to FDA for permission to make their lenses available generally to eye surgeons. Only lenses that are adequately tested and proved safe and effective will be approved by FDA for general marketing.

Under the regulation, manufacturers have 90 days to submit proposed plans for manufacturing, sterilization and testing of their products.

These restrictions are needed because there have been reports of more than 100 serious injuries, including five eye losses, after intraocular lens implantation. The injuries appear related to inadequate quality control and manufacturing practices.

The regulation was effective upon publication in the Federal Register.

Dr. William A. Altmeir Elected By ACS

Dr. William A. Altemeier, Chairman of the Department of Surgery at the University of Cincinnati College of Medicine for 25 years, recently was elected President-Elect of the American College of Surgeons. He will be installed as President in October, 1978, at the Clinical Congress of ACS in San Francisco.

Medical Meetings

Dec. 3-8—Am. Academy of Dermatology, Dallas.

Dec. 4-7—AMA House of Delegates Interim Meeting, Chicago.

Dec. 5-7—Southern Surgical Assn., Hot Springs, Va.

Dec. 7-9—Planning and Operating Hospital-Based Ambulatory Surgical Services (Am. Hospital Assn.), Buffalo, N. Y.

Dec. 10-13—AMA Winter Scientific Meeting, Miami Beach.

1978

Jan. 23-25—Society of Thoracic Surgeons, Orlando, Fla.

Jan. 27-29—11th Mid-Winter Clinical Conference, Charleston.

Feb. 3-5—74th Congress on Medical Education, Chicago.

Feb. 8-12—American College of Psychiatrists, New Orleans.

Feb. 13-16—The Management of Obesity (Dept. of Psychiatry, Johns Hopkins U. School of Med.), Baltimore.

Feb. 22-26—Am. Assn. of Genito-Urinary Surgeons, Key Largo, Fla.

Feb. 22-26—Am. College of Nuclear Physicians, San Francisco.

Feb. 23-28—Am. Academy of Orthopaedic Surgeons, Dallas.

March 6-9—Am. College of Cardiology, Anaheim, Calif.

March 13-16—ACS, New Orleans.

April 5-6—W. Va. Chapter, Am. Academy of Pediatrics, Wheeling.

April 7-9—W. Va. Chapter, AAFP, Charleston.

April 26-29—W. Va. Academy of Ophthal. & Otolaryn., White Sulphur Springs.

May 3-6—W. Va. Chapter, ACS, White Sulphur Springs.

June 10—W. Va. State Society of Anesthesiologists, Morgantown.

June 17-22—AMA Annual Meeting, St. Louis.

Aug. 23-26—111th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Nov. 11-14—Southern Medical Assn., Atlanta.

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INDEX TO VOLUME LXXIII

THE WEST VIRGINIA MEDICAL JOURNAL—1977

A

Abdominal Angina—Robert J. Gardner, M.D.; Thomas J. Tarnay, M.D.; Dominic A. Antico, M.D.; Nancy Gardner, B.A.; and Alvin L. Watne, M.D. Jan. 1

Abu-Rahma, A. F., M.D.—Primary Adenocarcinoma of the Vermiform Appendix: Report of Five New Cases and Review of the Literature Nov. 296

Abu-Rahma, A. F., M.D.—Hemorrhagic Diathesis and Surgery Aug. 173

Acute Ureteropelvic Junction Obstruction by an Aberrant Blood Vessel—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and Charles A. Hoffman, M.D. June 121

Adenocarcinoma, Primary, of the Vermiform Appendix: Report of Five New Cases and Review of the Literature—A. F. Abu-Rahma, M.D. Nov. 296

Adenoma, Villous, of the Stomach—T. H. Chang, M.D. May 95

Air Filtration System, High Efficiency, The Effect on Nighttime Asthma Attacks—Merle S. Scherr, M.D.; and Lorna W. Peck July 144

Andrews, Charles E., M.D.—A Colleague's View on Medicine and Health (Special Article) Nov. 302

Aneurysms, Pseudoventricular—Reverdy H. Jones, Jr., M.D. Nov. 287

Angina, Abdominal—Robert J. Gardner, M.D.; Thomas J. Tarnay, M.D.; Dominic A. Antico, M.D.; Nancy Gardner, B.A.; and Alvin L. Watne, M.D. Jan. 1

Angina, Prinzmetal Variant, Stokes-Adams Attack in (Report of Two Cases and Review of the Literature)—Gita Roy, M.D., Harold Selinger, M.D.; and William H. Carter, M.D. Jan. 5

Anido, Vicente, M.D.; and Gary Marcus, M.D.—Multiple Myeloma, A 'B' Cell Blood Dyscrasia Sept. 221

Antibacterial Prophylaxis: Ideas Old and New (Medical Grand Rounds from the West Virginia University Medical Center)—Edited by Raymond B. Weiss, M.D. Jan. 11

Antico, Dominic, M.D.; Edwin C. James, M.D.; and Josh C. Tunca, M.D.—A Simple Method for Recovering the Embolized Polyethylene Catheter from the Heart and Pulmonary Artery Apr. 77

Antico, Dominic A., M.D.; Nancy Gardner, B.A., Alvin L. Watne, M.D.; Robert J. Gardner, M.D.; and Thomas J. Tarnay, M.D.—Abdominal Angina Jan. 1

Appendix, Vermiform, Primary Adenocarcinoma of the: Report of Five New Cases and Review of the Literature—A. F. Abu-Rahma, M.D. Nov. 296

Asaro, Joseph R., M.D.—Minimal Cancer of the Breast: Diagnosis by Mammography Feb. 25

Asato, Hiroaki, M.D.; Allen F. Bowyer, M.D.; Abnash C. Jain, M.D.; Robert J. Marshall, M.D.; and Thomas J. Tarnay, M.D.—Run-Away Pacemaker: Diagnosis and Treatment Apr. 73

Asthma Attacks, Nighttime, The Effects of High Efficiency Air Filtration System on—Merle S. Scherr, M.D.; and Lorna W. Peck July 144

B

Blood Dyscrasia, A 'B' Cell, Multiple Myeloma—Vicente Anido, M.D.; and Gary Marcus, M.D. Sept. 221

Blood Vessel, Acute Ureteropelvic Junction Obstruction by an Aberrant—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and Charles A. Hoffman, M.D. June 121

Bowyer, Allen F., M.D.; Abnash C. Jain, M.D.; Robert J. Marshall, M.D.; Thomas J. Tarnay, M.D.; and Hiroaki Asato, M.D.—Run-Away Pacemaker: Diagnosis and Treatment Apr. 73

Bradford, Bert, Jr., M.D.; and Robert D. Patchell, M.D.—Transvaginal Repair of Rectal Stricture Utilizing the Martius Bulbocavernosus Pedicle Graft June 124

Budd, John H., M.D.—Physician, Look In Your Mirror! (Special Article) Dec. 315

C

Calcium, Renal, and Its Implication—Alfred K. Pfister, M.D. Dec. 319

Cancer, Invasive Cervical, Simple Hysterectomy is Inadequate Therapy for—Josh C. Tunca, M.D.; and O. E. Dement, M.D. Oct. 255

Cancer, Minimal, of the Breast: Diagnosis by Mammography—Joseph R. Asaro, M.D. Feb. 25

Carcinoma, Thyroid (Medical Grand Rounds from the West Virginia University Medical Center)—Edited by Irma H. Ullrich, M.D. Dec. 326

Carter, William H., M.D.; Gita Roy, M.D.; and Harold Selinger, M.D.—Stokes-Adams Attack in Prinzmetal Variant Angina (Report of Two Cases and Review of the Literature) Jan. 5

Chang, T. H., M.D.—Villous Adenoma of the Stomach May 95

Cholestyramine Therapy in Postgastrectomy Alkaline Bile Gastritis—Rafael Antonio Ortiz, M.D.; and Esther Torres, M.D. Feb. 31

Colleague's View on Medicine and Health (Special Article)—Charles E. Andrews, M.D. Nov. 302

Colposcopy, Management of Abnormal Female Genital Tract Cytology by—Josh C. Tunca, M.D.; and Loraine T. Withersty, M.D. Mar. 43

Colposcopy, The Role of, in Gynecological Practice—F. G. Giustini, M.D. June 115

Controversy in Internal Medicine: Strict Versus Relaxed Therapy of Diabetes Mellitus (Medical Grand Rounds from the West Virginia University Medical Center)—Edited by Raymond B. Weiss, M.D. Mar. 54

Convocation, 1977 Student Research, West Virginia University School of Medicine Oct. 258

Cytology by Colposcopy, Management of Abnormal Female Genital Tract—Josh C. Tunca, M.D.; and Loraine T. Withersty, M.D. Mar. 43

D

Dement, O. E., M.D.; and Josh C. Tunca, M.D.—Simple Hysterectomy is Inadequate Therapy for Invasive Cervical Cancer Oct. 255

DeVita, Vincent T., Jr., M.D.; and Richard I. Fisher, M.D.—Malignant Melanoma: Prognostic Factors and Therapeutic Results Aug. 167

Diathesis, Hemorrhagic, and Surgery—A. F. Abu-Rahma, M.D. Aug. 173

Drug-Induced Systemic Lupus Erythematosis—(Medical Grand Rounds from the West Virginia University Medical Center)—Edited by Raymond B. Weiss, M.D. May 101

E

EDTA, Other *In Vitro* Changes Induced by, and Platelet Satellitosis—Terrence Steiner, M.D. Dec. 322

Effects, The, of High Efficiency Air Filtration System on Nighttime Asthma Attacks—Merle S. Scherr, M.D.; and Lorna W. Peck July 144

Emergency Laryngectomy for Trauma of the Larynx—Romeo Y. Lim, M.D. May 99

Emotional Disorders, Postpartum—David J. Withersty, M.D. July 149

F

Fatal Case of Idiopathic Omental Infarction, A—Robert A. Patchell, M.D. Feb. 29

Fisher, Richard I., M.D.; and Vincent T. DeVita, Jr., M.D.—Malignant Melanoma: Prognostic Factors and Therapeutic Results Aug. 167

Francke, Paul, M.D.; Lionel Nair, M.D.; N. T. Shanmugham, M.D.; and Martin Wershba, M.D.—Selective Transcatheter Embolization of a Renal Neoplasm: Report of a Case July 141

G

Gardner, Nancy, B.A.; Alvin L. Watne, M.D.; Robert J. Gardner, M.D.; Thomas J. Tarnay, M.D.; and Dominic A. Antico, M.D.—Abdominal Angina ... Jan. 1

Gardner, Robert J., M.D.; Thomas J. Tarnay, M.D.; Dominic A. Antico, M.D.; Nancy Gardner, B.A.; and Alvin L. Watne, M.D.—Abdominal Angina ... Jan. 1

Gastritis, Postgastrectomy Alkaline Bile, Cholestyramine Therapy in—Rafael Antonio Ortiz, M.D.; and Esther Torres, M.D. ... Feb. 31

Giustini, F. G., M.D.—Induction of Ovulation ... Mar. 47

Giustini, F. G., M.D.—The Role of Colposcopy in Gynecological Practice ... May 115

Graft, Martius Bulbocavernosus Pedicle, Transvaginal Repair of Rectal Stricture Utilizing the—Robert D. Patchell, M.D.; and Bert Bradford, Jr., M.D. ... June 124

Gynecological Practice, The Role of Colposcopy in—F. G. Giustini, M.D. ... May 115

H

Heart and Pulmonary Artery, A Simple Method for Recovering the Embolized Polyethylene Catheter from the—Edwin C. James, M.D.; Josh C. Tunca, M.D.; and Dominic Antico, M.D. ... Apr. 77

Hemorrhagic Diathesis and Surgery—A. F. Abu-Rahma, M.D. ... Aug. 173

Hodge, James R., M.D.—How People Get Well Through Psychiatry ... Apr. 80

Hoffman, Charles A., M.D.; Tara C. Sharma, M.D.; and Harold N. Kagan, M.D.—Acute Ureteropelvic Junction Obstruction by an Aberrant Blood Vessel ... June 121

How People Get Well Through Psychiatry—James R. Hodge, M.D. ... Apr. 80

Hrabovsky, Ellen, M.D.—Merits of a Pediatric Specialty—One Opinion (Special Report) ... Oct. 263

Hysterectomy, Simple, Inadequate Therapy for Invasive Cervical Cancer—Josh C. Tunca, M.D.; and O. E. Dement, M.D. ... Oct. 255

I

Induction of Ovulation—F. G. Giustini, M.D. ... Mar. 47

Infarction, Idiopathic Omental, A Fatal Case of—Robert D. Patchell, M.D. ... Feb. 29

J

Jain, Abnash C., M.D.; Robert J. Marshall, M.D.; Thomas J. Tarnay, M.D.; Hiroaki Asato, M.D.; and Allen F. Bowyer, M.D.—Run-Away Pacemaker: Diagnosis and Treatment ... Apr. 73

James, Edwin C., M.D.; Josh C. Tunca, M.D.; and Dominic Antico, M.D.—A Simple Method for Recovering the Embolized Polyethlene Catheter from the Heart and Pulmonary Artery ... Apr. 77

Jones, Reverdy H., Jr., M.D.—Pseudoventricular Aneurysms ... Nov. 287

K

Kagan, Harold N., M.D.; Charles A. Hoffman, M.D.; and Tara C. Sharma, M. D.—Acute Ureteropelvic Junction Obstruction by an Aberrant Blood Vessel ... June 121

Kagan, Harold N., M.D.; John P. Sheils, M.D.; and Tara C. Sharma, M.D.—Testicular Torsion in Neonates ... Sept. 226

Khalil, Ghassan A., M.D.—Subcutaneous Mastectomy with Immediate Replacement by a Silastic Implant ... Aug. 179

L

Laryngectomy, Emergency, for Trauma of the Larynx—Romeo Y. Lim, M.D. ... May 99

Larynx, Emergency Laryngectomy for Trauma of the—Romeo Y. Lim, M.D. ... May 99

Lim, Romeo Y., M.D.—Emergency Laryngectomy for Trauma of the Larynx ... May 99

M

Mahood, John J., M.D.—Presidential Address ... Oct. 253

Malignant Melanoma: Prognostic Factors and Therapeutic Results—Vincent T. DeVita, Jr., M.D.; and Richard I. Fisher, M.D. ... Aug. 167

Mammography, Diagnosis by: Minimal Cancer of the Breast—Joseph R. Asaro, M.D. ... Feb. 25

Management of Abnormal Female Genital Tract Cytology by Colposcopy—Josh C. Tunca, M.D.; and Loraine T. Withersty, M.D. ... Mar. 43

Marcus, Gary, M.D.; Vicente Anido, M.D.—Multiple Myeloma, A 'B' Cell Blood Dyscrasia ... Sept. 221

Marshall, Robert J., M.D.; Thomas J. Tarnay, M.D.; Hiroaki Asato, M.D.; Allen F. Bowyer, M.D.; and Abnash C. Jain, M.D.—Run-Away Pacemaker: Diagnosis and Treatment ... Apr. 73

Mastectomy, Subcutaneous, with Immediate Replacement by a Silastic Implant—Ghassan A. Khalil, M.D. ... Aug. 179

Medical Grand Rounds from the West Virginia University Medical Center—Edited by Raymond B. Weiss, M.D.:
- Antibacterial Prophylaxis: Ideas Old and New ... Jan. 11
- Controversy in Internal Medicine: Strict Versus Relaxed Therapy of Diabetes Mellitus ... Mar. 54
- Drug-Induced Systemic Lupus Erythematosus ... May 101
- Multiple Myeloma Management ... July 151
- Pericarditis ... Sept. 229

Medical Grand Rounds from the West Virginia University Medical Center—Edited by Irma H. Ullrich, M.D.:
- Thyroid Carcinoma ... Dec. 326

Medicine and Health, A Colleague's View on—Charles E. Andrews, M.D. ... Nov. 302

Melanoma, Malignant: Prognostic Factors and Therapeutic Results—Vincent T. DeVita, Jr., M.D.; and Richard I. Fisher, M.D. ... Aug. 167

Merits of a Pediatric Specialty—One Opinion (Special Report)—Ellen Hrabovsky, M.D. ... Oct. 263

Minimal Cancer of the Breast: Diagnosis by Mammography—Joseph R. Asaro, M. D. ... Feb. 25

Multiple Myeloma, A 'B' Cell Blood Dyscrasia—Vicente Anido, M.D.; and Gary Marcus, M.D. ... Sept. 221

Multiple Myeloma Management (Medical Grand Rounds from the West Virginia Medical Center)—Edited by Raymond B. Weiss, M.D. ... July 151

Myeloma, Multiple, A 'B' Cell Blood Dyscrasia—Vicente Anido, M.D.; and Gary Marcus, M.D. ... Sept. 221

N

Nair, Lionel, M.D.; N. T. Shanmugham, M.D.; Martin Wershba, M.D.; and Paul Francke, M.D.—Selective Transcatheter Embolization of a Renal Neoplasm: Report of a Case ... July 141

Neonates, Testicular Torsion in—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and John P. Sheils, M.D. ... Sept. 226

Neoplasm, Renal, Selective Transcatheter Embolization of a: Report of a Case—Martin Wershba, M.D.; Paul Francke, M.D.; Lionel Nair, M.D.; and N. T. Shanmugham, M.D. ... July 141

O

Ortiz, Rafael Antonio, M.D.; and Esther Torres, M.D.—Cholestyramine Therapy in Postgastrectomy Alkaline Bile Gastritis ... Feb. 31

Ovulation, Induction of—F. G. Giustini, M.D. ... Mar. 47

P

Pacemaker, Run-Away: Diagnosis and Management—Hiroaki Asato, M.D.; Allen F. Bowyer, M.D.; Abnash C. Jain, M.D.; Robert J. Marshall, M.D.; and Thomas J. Tarnay, M.D. ... Apr. 73

Patchell, Robert D., M.D.—A Fatal Case of Idiopathic Omental Infarction ... Feb. 29

Patchell, Robert D., M.D.; and Bert Bradford, Jr., M.D.—Transvaginal Repair of Rectal Stricture Utilizing the Martius Bulbocavernosus Pedicle Graft ... June 124

Peck, Lorna W.; and Merle S. Scherr, M.D.—The Effects of High Efficiency Air Filtration System on Nighttime Asthma Attacks ... July 144

Pediatrics Specialty, Merits of A—One Opinion (Special Report)—Ellen Hrabovsky, M.D. Oct. 263

Pericarditis (Medical Grand Rounds from West Virginia University Medical Center)—Edited by Raymond B. Weiss, M.D. Sept. 229

Pfister, Alfred K., M.D.—Renal Calcium and Its Implications Dec. 319

Physician, Look In Your Mirror! (Special Article)—John H. Budd, M.D. Dec. 315

Platelet Satellitosis and Other *In Vitro* Changes Induced by EDTA—Terrence Steiner, M.D. Dec. 322

Postgastrectomy Alkaline Bile Gastritis, Cholestyramine Therapy in—Rafael Antonio Ortiz, M.D.; and Esther Torres, M.D. Feb. 31

Postpartum Emotional Disorders—David J. Withersty, M.D. July 149

Presidential Address—John J. Mahood, M.D. Oct. 253

Pseudoventricular Aneurysms—Reverdy H. Jones, Jr., M.D. Nov. 287

Psychiatry, How People Get Well Through—James R. Hodge, M.D. Apr. 80

R

Renal Calcium and Its Implications—Alfred K. Pfister, M.D. Dec. 319

Renal Neoplasm, Selective Transcatheter Embolization of a: Report of a Case—Martin Wershba, M.D.; Paul Francke, M.D.; Lionel Nair, M.D.; and N. T. Shanmugham, M.D. July 141

Role of Colposcopy in Gynecological Practice—F. G. Giustini, M.D. May 115

Roy, Gita, M.D.; Harold Selinger, M.D.; and William H. Carter, M.D.—Stokes-Adams Attack in Prinzmetal Variant Angina (Report of Two Cases and Review of the Literature) Jan. 5

Run-Away Pacemaker: Diagnosis and Management—Hiroaki Asato, M.D.; Allen F. Bowyer, M.D.; Abnash C. Jain, M.D.; Robert J. Marshall, M.D.; and Thomas J. Tarnay, M.D. Apr. 73

S

Satellitosis, Platelet, and Other *In Vitro* Changes Induced by EDTA—Terrence Steiner, M.D. Dec. 322

Scherr, Merle S., M.D.; and Lorna W. Peck—The Effects of High Efficiency Air Filtration System on Nighttime Asthma Attacks July 144

Selective Transcatheter Embolization of a Renal Neoplasm: Report of a Case—Martin Wershba, M.D.; Paul Francke, M.D.; Lionel Nair, M.D.; and N. T. Shanmugham, M.D. July 141

Selinger, Harold, M.D.; William H. Carter, M.D.; and Gita Roy, M.D.—Stokes-Adams Attack in Prinzmetal Variant Angina (Report of Two Cases and Review of the Literature) Jan. 5

Shanmugham, N. T., M.D.; Martin Wershba, M.D.; Paul Francke, M.D.; and Lionel Nair, M.D.—Selective Transcatheter Embolization of Renal Neoplasm: Report of a Case July 141

Sharma, Tara C., M.D.; Harold N. Kagan, M.D.; and Charles A. Hoffman, M.D.—Acute Ureteropelvic Junction Obstruction by an Aberrant Blood Vessel June 121

Sharma, Tara C., M.D.; Harold N. Kagan, M.D.; and John P. Sheils, M.D.—Testicular Torsion in Neonates Sept. 226

Sheils, John P., M.D.; Tara C. Sharma, M.D.; and Harold N. Kagan, M.D.—Testicular Torsion in Neonates Sept. 226

Silastic Implant, with Immediate Replacement by a, Subcutaneous Mastectomy—Ghassan A. Khalil, M.D. Aug. 179

Simple Method for Recovering the Embolized Polyethylene Catheter from the Heart and Pulmonary Artery—Edwin C. James, M.D.; Josh C. Tunca, M.D.; and Dominic Antico, M.D. Apr. 77

Steiner, Terrence, M.D.—Platelet Satellitosis and Other *In Vitro* Changes Induced by EDTA Dec. 322

Stokes-Adams Attack in Prinzmetal Variant Angina (Report of Two Cases and Review of the Literature)—Gita Roy, M.D.; Harold Selinger, M.D.; and William H. Carter, M.D. Jan. 5

Stomach, Villous Adenoma of the—T. H. Chang, M.D. May 95

Stricture, Rectal, Transvaginal Repair of, Utilizing the Martius Bulbocavernosus Pedicle Graft—Robert D. Patchell, M.D.; and Bert Bradford, Jr., M.D. June 124

Student Research Convocation, 1977, West Virginia University School of Medicine Oct. 258

Subcutaneous Mastectomy with Immediate Replacement by a Silastic Implant—Ghassan A. Khalil, M.D. Aug. 179

T

Tarnay, Thomas J., M.D.; Dominic A. Antico, M.D.; Nancy Gardner, B.A.; Alvin L. Watne, M.D.; and Robert J. Gardner, M.D.—Abdominal Angina Jan. 1

Tarnay, Thomas J., M.D.; Hiroaki Asato, M.D.; Allen F. Bowyer, M.D.; Abnash C. Jain, M.D.; and Robert J. Marshall, M.D.—Run-Away Pacemaker: Diagnosis & Treatment Apr. 73

Testicular Torsion in Neonates—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and John P. Sheils, M.D. Sept. 226

Thyroid Carcinoma (Medical Grand Rounds from the West Virginia University Medical Center)—Edited by Irma H. Ullrich, M.D. Dec. 326

Torres, Esther, M.D.; and Rafael Antonio Ortiz, M.D.—Cholestyramine Therapy in Postgastrectomy Alkaline Bile Gastritis Feb. 31

Torsion, Testicular, in Neonates—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and John P. Sheils, M.D. Sept. 226

Transvaginal Repair of Rectal Stricture Utilizing the Martius Bulbocavernosus Pedicle Graft—Robert D. Patchell, M.D.; and Bert Bradford, Jr., M.D. June 124

Tunca, Josh C., M.D.; Dominic Antico, M.D.; and Edwin C. James, M.D.—A Simple Method for Recovering the Embolized Polyethylene Catheter from the Heart and Pulmonary Artery Apr. 77

Tunca, Josh C., M.D.; and O. E. Dement, M.D.—Simple Hysterectomy is Inadequate Therapy for Invasive Cervical Cancer Oct 255

Tunca, Josh C., M.D.; and Loraine T. Withersty, M.D.—Management of Abnormal Female Genital Tract Cytology by Colposcopy Mar. 43

U

Ullrich, Irma H., M.D. (Edited by)—Medical Grand Rounds from the West Virginia University Medical Center:
Thyroid Carcinoma Dec. 326

Ureteropelvic Junction Obstruction, Acute, by an Aberrant Blood Vessel—Tara C. Sharma, M.D.; Harold N. Kagan, M.D.; and Charles A. Hoffman, M.D. June 121

V

Villous Adenoma of the Stomach—T. H. Chang, M.D. May 95

W

Watne, Alvin L., M.D.; Robert J. Gardner, M.D.; Thomas J. Tarnay, M.D.; Dominic A. Antico, M.D.; and Nancy Gardner, B.A.—Abdominal Angina Jan. 1

Weiss, Raymond B., M.D. (Edited by)—Medical Grand Rounds from the West Virginia University Medical Center:
Antibacterial Prophylaxis: Ideas Old and New Jan. 11
Controversy in Internal Medicine: Strict Vesus Relaxed Therapy of Diabetes Mellitus Mar. 54
Drug-Induced Systemic Lupus Erythematosus May 101
Multiple Myeloma Management July 151
Pericarditis Sept. 229

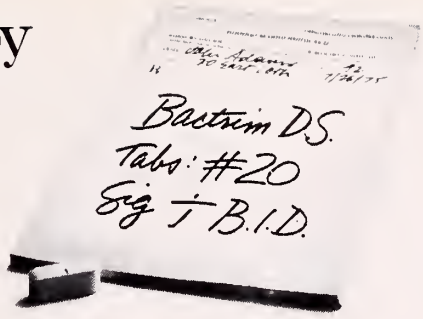
Wershba, Martin, M.D.; Paul Francke, M.D.; Lionel Nair, M.D.; and N. T. Shanmugham, M.D.—Selective Transcatheter Embolization of a Renal Neoplasm: Report of a Case July 141

West Virginia University School of Medicine, 1977 Student Research Convocation Oct. 258

Withersty, David J., M.D.—Postpartum Emotional Disorders July 149

Withersty, Loraine T., M.D.; and Josh C. Tunca, M.D.—Management of Abnormal Female Genital Tract Cytology by Colposcopy Mar. 43

10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Bactrim™

(80 mg trimethoprim and 400 mg sulfamethoxazole)

2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

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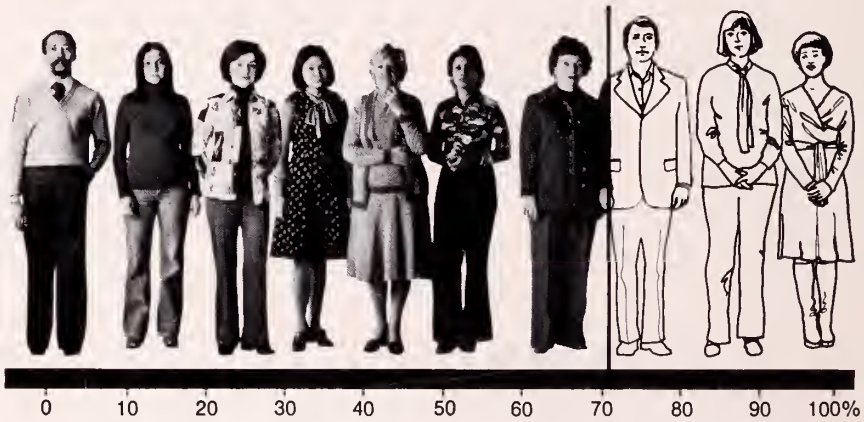
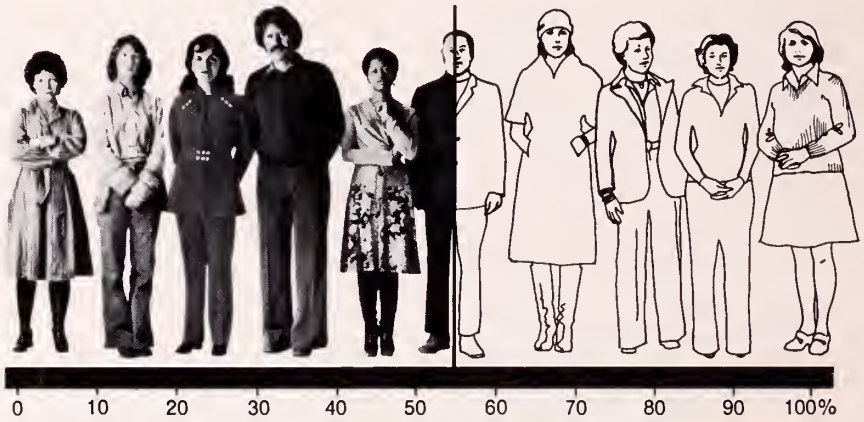
In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

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700934

DECEMBER 1977

A character all its own.

Valium (diazepam) is a benzodiazepine with a character all its own. Pharmacologically, it has been described as more potent mg-per-mg than other available anxiolytic benzodiazepines. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

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Nutley, New Jersey 07110

THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® CIV

chlordiazepoxide HCl/Roche

5mg, 10mg, 25mg capsules

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Please see following page.

THE ANXIETY-SPECIFIC.

Since its discovery in the research laboratories at Roche, Librium has been the object of ongoing pharmacologic and clinical investigation.

The published record on Librium is enormous. So large, in fact, we put it into a computer literature retrieval system to make it more accessible in answering your inquiries.*

It's a record that reveals a consistent pattern of patient response. A highly favorable benefits-to-risk ratio. And minimal interference with many primary medications.

Doing one thing well. Basically, that's what Librium is all about.

LIBRIUM® CIV
chlordiazepoxide HCl/Roche

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*If you have a question about Librium or any other Roche product, write to Professional Services, Roche Laboratories, Nutley, New Jersey 07110.

Please see preceding page for a summary of product information.

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